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BAGHEL COMPUTER CENTRE

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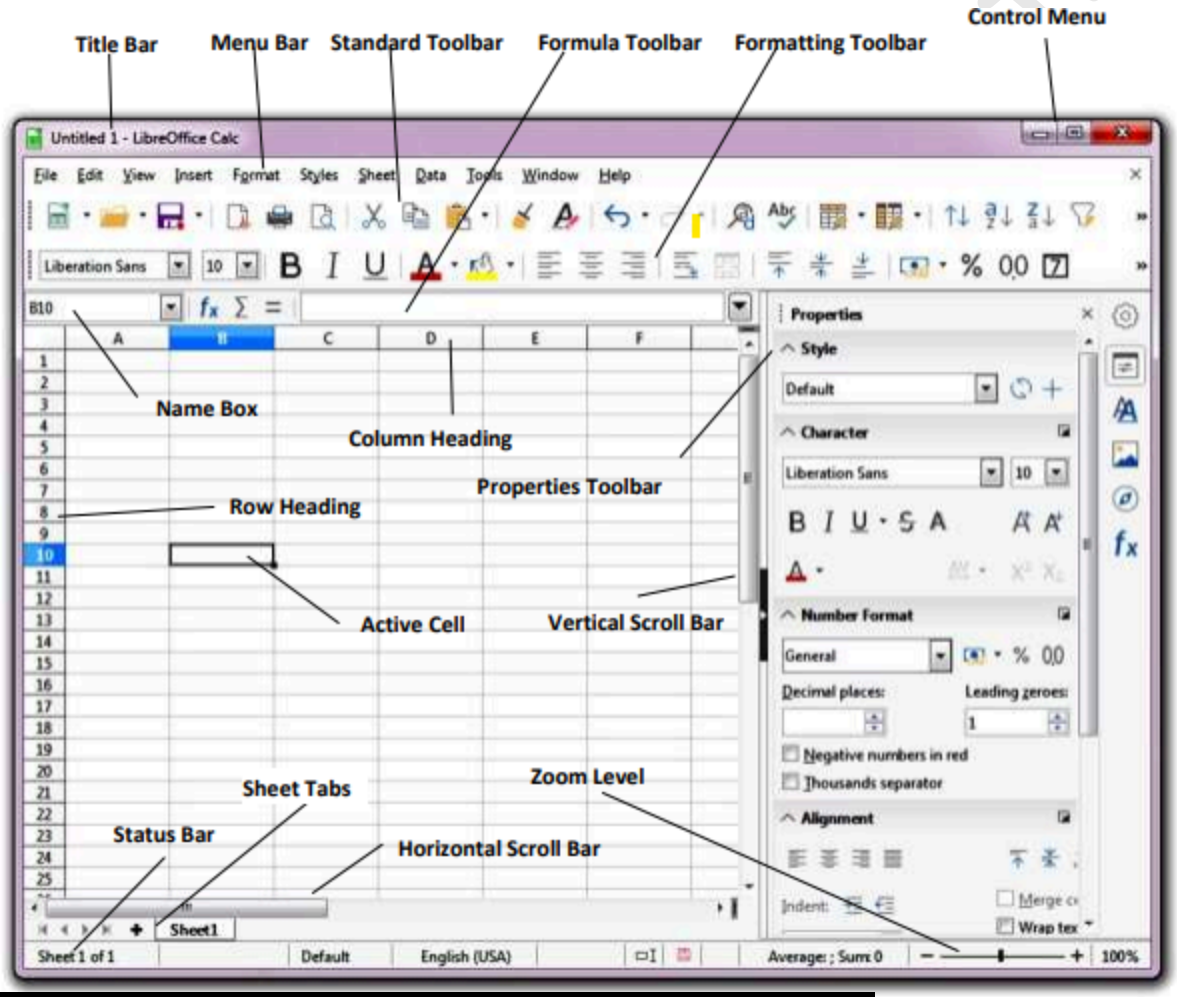
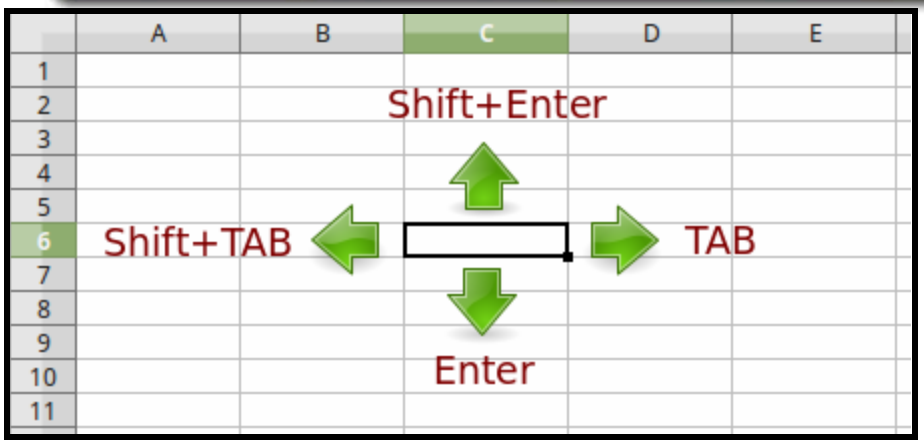
Screen Interface





Important Terms

s.no	Particular	Answer
1	Default file name	Untitled 1
2	Default font name	Liberation sans
3	Default font size	10
4	Minimum font size	6
5	Maximum font size	96
6	Minimum customizable Font size	2
7	Maximum customizable Font size	999.9
8	Minimum zooming range	20%

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9	Maximum zooming range	400%
10	Default zooming range	100%
11	Total number of row	1048576
12	Total number of column	Old data:- AMJ (1024) New Data:- XFD (16384)
13	Default text alignment	left
14	Default digit alignment	right

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Function syntax

=function name (argument)

Cell referencing

1. Relative Cell Referencing:

- The formula adjusts automatically when copied to new cells.

- It is denoted by just the column and row labels, without any dollar signs.

	A	B	C	
4	Value 1	Value 2	Relative	Result
5	10	20	=SUM(A5,B5)	30
6	20	30	=SUM(A6,B6)	50
7	30	40	=SUM(A7,B7)	70

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2. Absolute Cell Referencing:

- In absolute cell referencing, the cell reference does not change when copied to new cells.

- It is denoted by adding dollar signs ($) before the column letter and row number (e.g., A1).

- When copied to new cells, the formula will still refer to the same absolute cell.

	A	B	C	D
4	Value 1	Value 2	Absolute	Result
5	10	20	=SUM(A5,B5)	30
6				30
7				30

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3. Mixed Cell Referencing:

- Mixed cell referencing involves a combination of absolute and relative references.

- You can fix either the column or the row while allowing the other to adjust.

- For example, $A1 means that the column is absolute (A), but the row is relative (1), and A$1 means that the row is absolute (1), but the column is relative (A).

	A	B	C	
4	Relative	Absolute	Mixed	Result
5	10	20	=SUM(A5,B5)	30
6	20			40
7	30			50

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numberMath Function

1. min:

Definition: Returns the smallest value in a range.

Syntax: =min(number 1, number 2……..)

INPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MIN
2	4	3	=MIN(A2,B2)

OUTPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MIN
2	4	3	3

BAGH COMPUTER CENTRE

2. max:

Definition: Returns the largest value in a range.

Syntax: =max(number 1, number 2……..)

INPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MAX
2	4	3	=MAX(A2,B2)

OUTPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MAX
2	4	3	4

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3. power:

Definition: Raises a number to a power.

Syntax: =power(Base, Exponent)

INPUT

	A	B	C
1	BASE	EXPONENT	POWER
2	4	3	=POWER(A2,B2)

OUTPUT

	A	B	C
1	BASE	EXPONENT	POWER
2	4	3	64

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4. product:

Definition: Returns the product of all numbers in a range.

Syntax: =product(number 1, number 2)

INPUT

	A	B	C
1	NUMBER 1	NUMBER 2	PRODUCT
2	4	3	=PRODUCT(A2,B2)

OUTPUT

	A	B	C
1	NUMBER 1	NUMBER 2	PRODUCT
2	4	3	12

BAGHEL C... CENTRE

5. mod:

Definition: Returns the remainder of a division.

Syntax: =mod(dividend, divisor)

INPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MOD
2	4	3	=MOD(A2,B2)

OUTPUT

	A	B	C
1	NUMBER 1	NUMBER 2	MOD
2	4	3	1

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6. abs:

Definition: Returns the absolute value of a number.

Syntax: =abs(number)

	A	B	C
1	Number	ABS	Result
2	0	=ABS(A2)	0
3	-1		1
4	-2.5		2.5
5	-3		3
6	3		3
7	3.5		3.5

BAGHEL C... CENTRE

7. rand:

Definition: Generates a random number between 0 and 1.

Syntax: =rand()

8. randbetween:

Definition: Generates a random integer between specified bottom and top values.

Syntax: =randbetween(bottom, top)

9. factorial:

Definition: Calculates the factorial of a number.

Syntax: =fact(number)

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10. odd:

Definition: Checks if a number is odd.

Syntax: =odd(number)

	A	B	C
1	**Number**	**Odd**	**Result**
2	0	=ODD(A2)	1
3	-1		-1
4	-2.5		-3
5	-3		-3
6	4		5
7	4.5		5

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11. even:

Definition: Checks if a number is even.

Syntax: =even(number)

Number	Even	Result
0	0	0
-1		-2
-2.5		-4
-3		-4
3		4
4.5		6

12. quotient:

Definition: Returns the integer portion of a division.

Syntax: =quotient(numerator, denominator)

Numerator	Denominator	Quotient	RESULT
25	3	=QUOTIENT(A2,B2)	8
145	2	=QUOTIENT(A3,B3)	72

13. sqrt:

Definition: Calculates the square root of a number.

Syntax: =sqrt(number)

	A	B	C
1	Number	sqrt	Result
2	4	=SQRT(A2)	2
3	9		3
4	16		4
5	25		5
6	36		6
7	121		11

Note:- to find any number root

=power value ^ (1/ exponent value)

	A	B	C	D
1	power value	exponent value	formula	result
2	1331	3	=A2^(1/B2)	11
3	64	2	=A3^(1/B3)	8

14. ceiling:

Definition: Rounds a number up to the nearest integer or multiple of significance.

Syntax: =ceiling(number,significance)

	A	B	C	
1	Number	Significance	ceiling	RESULT
2	25	3	=ceiling(A2,B2)	27
3	145	2	=ceiling(A3,B3)	146

15. floor:

Definition: Rounds a number down to the nearest integer or multiple of significance.

Syntax: =floor(number,significance)

	A	B	C	D
1	Number	Significance	Floor	RESULT
2	25	3	=floor(A2,B2)	24
3	145	2	=floor(A3,B3)	144

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16. sign:

Definition: Returns the sign of a number (1 for positive, -1 for negative, 0 for zero).

Syntax: =sign(number)

	A	B	C
1	Number	Mround	RESULT
2	0	=sign(A2)	0
3	26		1
4	-34		-1

17. mround:

Definition: Rounds a number to the nearest multiple.

Syntax: =mround(number, multiple)

	A	B	C	D
1	Number	Multiple	Mround	RESULT
2	25	3	=Mround(A2,B2)	24
3	26	3	=Mround(A3,B3)	27

Text function

1. concatenate:

Definition: Combines two or more strings to create a single string.

Syntax:=concatenate(text1, text2, ...)

INPUT

	A	B	C	D
1	TEXT 1	TEXT 2	TEXT 3	CONCATENATE
2	A	B	C	=CONCATENATE(A2,B2,C2)

OUTPUT

	A	B	C	D
1	TEXT 1	TEXT 2	TEXT 3	CONCATENATE
2	A	B	C	ABC

2. left:

Definition: Returns a specified number of characters from the left side of a string.

Syntax: =left(text, number)

INPUT

	A	B	C
1	TEXT	NUMBER	LEFT
2	EDUCATION	3	=LEFT(A2,B2)

OUTPUT

	A	B	C
1	TEXT	NUMBER	LEFT
2	EDUCATION	3	EDU

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3. right:

Definition: Returns a specified number of characters from the right side of a string.

Syntax:=right(text, number)

INPUT

	A	B	C
1	TEXT	NUMBER	RIGHT
2	EDUCATION	3	=RIGHT(A2,B2)

OUTPUT

	A	B	C
1	TEXT	NUMBER	RIGHT
2	EDUCATION	3	ION

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4. len:

Definition: Returns the length of a string.

Syntax: =len(text)

INPUT

	A	B
1	TEXT	LEN
2	EDUCATION	=LEN(A2)

OUTPUT

	A	B
1	TEXT	LEN
2	EDUCATION	9

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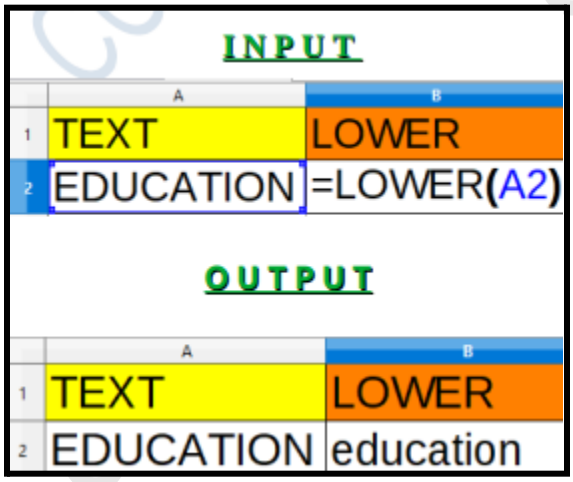
5. lower:

Definition: Converts all characters in a string to lowercase.

Syntax: =lower(text)



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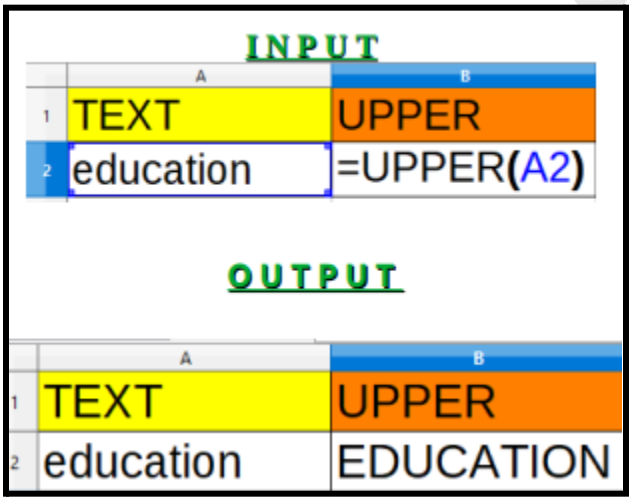
6. upper:

Definition: Converts all characters in a string to uppercase.

Syntax: =upper(text)



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7. mid:

Definition: Returns a specified number of characters from a string, starting at a specified position.

Syntax:=mid(text, start, number)

INPUT

	A	B	C	D
1	TEXT	START	NUMBER	MID
2	education	3	6	=MID(A2,B2,C2)

OUTPUT

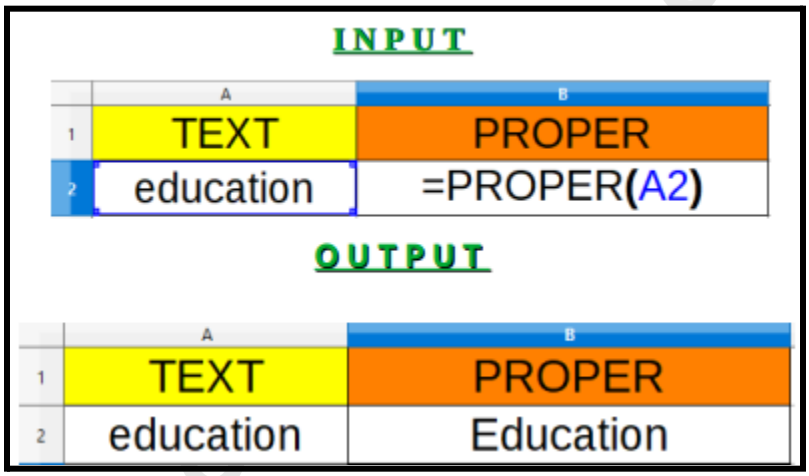
	A	B	C	D
1	TEXT	START	NUMBER	MID
2	education	3	6	ucatio

BAGHEL

8. proper:

Definition: Converts the first letter of each word in a string to uppercase.

Syntax:=proper(text)



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9. substitute:

Definition: Replaces occurrences of a specific character or string within a string with another character or string.

Syntax: =substitute(text, search text,new text)

INPUT

	A	B	C	D
1	TEXT	SEARCH TEXT	NEW TEXT	SUBSTITUTE
2	123123	2	AB	=SUBSTITUTE(A2,B2,C2)

OUTPUT

	A	B	C	D
1	TEXT	SEARCH TEXT	NEW TEXT	SUBSTITUTE
2	123123	2	AB	1AB31AB3

10. repeat:

Definition: Repeats a given string a specified number of times.

Syntax:=rept(text, number)

Input

	A	B	C
1	TEXT	NUMBER	REPEAT
2	a	4	=REPT(A2,B2)

output

	A	B	C
1	TEXT	NUMBER	REPEAT
2	a	4	aaaa

BAGHEL COMPUTER CENTRE

Sum series

1. sum:

Definition: Adds all the numbers in a range of cells.

Syntax: =sum(number1,number2……)

	A
1	Number
2	1
3	2
4	3
5	4
6	5
7	6
8	7
9	8
10	9
11	10
12	=SUM(A2:A11)

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2. sumif:

Definition: Adds the cells specified by a given condition or criteria.

Syntax: =sumif(range, criteria,sum_range)

Month	Sale
Jan	10
Feb	33
Jan	45
Jan	85
Feb	56
Feb	48
Jan	57
Jan	45
Feb	25
Jan	10
Feb	24

Month	Sale	Result
Jan	=SUMIF(A2:A12,D5,B2:B12)	252
Feb	=SUMIF(A2:A12,D6,B2:B12)	186

BAGHEL CENTRE

3. sumifs:

Definition: Adds the cells in a range that meet multiple criteria.

Syntax: =sumifs(sum_range, range 1, criteria 1, range 2, criteria 2……)

	A	B	C	D	E	F	G	H
1	Month	Product	Sale					
2	Jan	Pen	10					
3	Feb	Book	33					
4	Jan	Toy	45		Month	PRODUCT	Sale	Result
5	Jan	Pen	85		Jan	Pen	=SUMIFS(C2:C12,A2:A12,E5,B2:B12,F5)	162
6	Feb	Book	56					
7	Feb	Toy	48					
8	Jan	Pen	57					
9	Jan	Book	45					
10	Feb	Toy	25					
11	Jan	Pen	10					
12	Feb	Book	24					

BAGHEL COMPUTER CENTRE

4. sumproduct:

Definition: Calculates the sum of the products of corresponding numbers in multiple arrays or ranges.

Syntax: =sumproduct(array1, array2, ...)

	A	B	C	D	E
1	PRICE	QTY			
2	10	2			
3	33	3			
4	45	5		SUMPRODUCT	RESULT
5	85	9		=SUMPRODUCT(A2:A12,B2:B12)	2309
6	56	6			
7	48	5			
8	57	2			
9	45	6			
10	25	4			
11	10	2			
12	24	5			

BAGHE... CENTRE

5. sumsq:

Definition: Calculates the sum of the squares of numbers in a list of arguments.

Syntax: =sumsq(number1, number2, ...)

	A	B	C	D	E
1	X	Y		SUMSQ	RESULT
2	10	2		=SUMSQ(A2,B2)	104

6. sumx2my2:

formula=$x^2 - y^2 = (x - y)(x + y)$

Syntax: =sumx2my2(array_x, array_y)

	A	B	C	D	E
1	X	Y		SUMX2MY2	RESULT
2	2	3		=SUMX2MY2(A2,B2)	-5

BAGHEL COMPUTER CENTRE

7. sumx2py2:

formula= $(x^2 + y^2)=(x+ y)^2-2xy$

Syntax: =sumx2py2(array_x, array_y)

	A	B	C	D	E
1	X	Y		SUMX2PY2	RESULT
2	2	3		=SUMX2PY2(A2,B2)	13

8. sumxmy2:

Formula = $(x-y)^2 = x^2 + y^2 - 2xy$

Definition: Calculates the sum of the squares of the differences of corresponding numbers in two arrays.

Syntax: =sumxmy2(array_x, array_y)

	A	B	C	D	E
1	X	Y		SUMXMY2	RESULT
2	2	3		=SUMXMY2(A2,B2)	1

BAGHE COMPUTER CENTRE

Average Series

1. AVERAGE:

Definition: Calculates the average (arithmetic mean) of a group of numbers.

Syntax: =AVERAGE(number1, number2, ……)

INPUT

	A	B	C	D
1	NUMBER 1	NUMBER 2	NUMBER 3	AVERAGE
2	4	3	2	=AVERAGE(A2,B2,C2)

OUTPUT

	A	B	C	D
1	NUMBER 1	NUMBER 2	NUMBER 3	AVERAGE
2	4	3	2	3

COMPUTER CENTRE

2. AVERAGEIF:

Definition: Calculates the average of the cells specified by a given condition or criteria.

Syntax: =AVERAGEIF(range, criteria, average_range)

Month	Sale
Jan	10
Feb	33
Jan	45
Jan	85
Feb	56
Feb	48
Jan	57
Jan	45
Feb	25
Jan	10
Feb	24

Month	Sale	Result
Jan	=AVERAGEIF(A2:A12,D5,B2:B12)	42
Feb	=AVERAGEIF(A2:A12,D6,B2:B12)	37.2

BAGHE... CENTRE

3. AVERAGEIFS:

Definition: Calculates the average of the cells specified by multiple conditions or criteria.

Syntax: =AVERAGEIFS(average_range, range 1, criteria 1, range 2, criteria 2……)

	A	B	C	D	E	F	G	H
1	Month	Product	Sale					
2	Jan	Pen	10					
3	Feb	Book	33					
4	Jan	Toy	45		Month	PRODUCT	Sale	Result
5	Jan	Pen	85		Jan	Pen	=AVERAGEIFS(C2:C12,A2:A12,E5,B2:B12,F5)	40.5
6	Feb	Book	56					
7	Feb	Toy	48					
8	Jan	Pen	57					
9	Jan	Book	45					
10	Feb	Toy	25					
11	Jan	Pen	10					
12	Feb	Book	24					

BAGHEL COMPUTER CENTRE

Count series

1. count:

Definition: Counts the number of cells containing numbers in a range.

- Blank cell = ✘
- Alphabet = ✘
- Number = ✓

Syntax: =count(range)

Input

	A	B
1	COUNT	
2	1	
3	2	
4		
5	a	
6	5	
7		
8	b	
9		
10	9	
11	10	
12	=COUNT(A2:A11)	

output

	A
1	COUNT
2	1
3	2
4	
5	a
6	5
7	
8	b
9	
10	9
11	10
12	5

COMPUTER CENTRE

2. counta:

Definition: Counts the number of cells that are not empty in a range, including numbers, text, or logical values.

- Blank cell = ✘
- Alphabet = ✓
- Number = ✓

Syntax: =counta(range)

Input

	A	B
1	COUNTA	
2	1	
3	2	
4		
5	a	
6	5	
7		
8	b	
9		
10	9	
11	10	
12	=COUNTA(A2:A11)	

output

	A
1	COUNTA
2	1
3	2
4	
5	a
6	5
7	
8	b
9	
10	9
11	10
12	7

BA MPUTER CENTRE

3. countblank:

Definition: Counts the number of empty cells in a range.

- Blank cell = ✓
- Alphabet = ✘
- Number = ✘

Syntax: =countblank(range)

Input

	A
1	COUNT BLANK
2	1
3	2
4	
5	a
6	5
7	
8	b
9	
10	9
11	10
12	=COUNTBLANK(A2:A11)

output

	A
1	COUNT BLANK
2	1
3	2
4	
5	a
6	5
7	
8	b
9	
10	9
11	10
12	3

BAG COMPUTER CENTRE

4. countif:

Definition: Counts the number of cells in a range that meet a specific condition.

Syntax: =countif(range, criteria)

INPUT

	A	B	C	D
1	COUNTIF			
2	ONE			
3	TWO		ONE/TWO	COUNTIF
4	ONE		ONE	=COUNTIF(A2:A11,C4)
5	ONE		TWO	=COUNTIF(A2:A11,C5)
6	TWO			
7	ONE			
8	ONE			
9	TWO			
10	TWO			
11	ONE			

OUTPUT

	A	B	C	D
1	COUNTIF			
2	ONE			
3	TWO		ONE/TWO	COUNTIF
4	ONE		ONE	6
5	ONE		TWO	4
6	TWO			
7	ONE			
8	ONE			
9	TWO			
10	TWO			
11	ONE			

5. countifs:

Definition: Counts the number of cells in a range that meet multiple conditions.

Syntax: =countifs(range1, criteria1, range2, criteria2, ...)

INPUT

	A	B	C	D	E	F
1	STUDENT	DIVISION				
2	MALE	FIRST				
3	FEMALE	FIRST				
4	MALE	SECOND				
5	MALE	SECOND				
6	MALE	FIRST				
7	FEMALE	SECOND				
8						
9	STUDENT	DIVISION	COUNTIFS			
10			=COUNTIFS(A2:A7,A10,B2:B7,B10)			
11			=COUNTIFS(A3:A8,A11,B3:B8,B11)			

OUTPUT

	A	B	C
1	STUDENT	DIVISION	
2	MALE	FIRST	
3	FEMALE	FIRST	
4	MALE	SECOND	
5	MALE	SECOND	
6	MALE	FIRST	
7	FEMALE	SECOND	
8			
9	STUDENT	DIVISION	COUNTIFS
10	MALE	FIRST	2
11	FEMALE	SECOND	1

Logical Function

1. if:

Definition: Returns one value if a condition is true and another value if it's false.

Syntax: =if(test,then value,otherwise value)

ex:-1

	A	B	C	D	E	F	
1	Name	Hindi	Math	Science	Total	IF (GRADE)	result
2	Amitesh	62	63	64	189	=IF(E2>=200,"A",IF(E2>=198,"B",IF(E2>=192,"C","FAIL")))	FAIL
3	Suresh	63	64	65	192	=IF(E3>=200,"A",IF(E3>=198,"B",IF(E3>=192,"C","FAIL")))	C
4	Mithlesh	64	65	66	195	=IF(E4>=200,"A",IF(E4>=198,"B",IF(E4>=192,"C","FAIL")))	C
5	Suraj	65	66	67	198	=IF(E5>=200,"A",IF(E5>=198,"B",IF(E5>=192,"C","FAIL")))	B
6	Deepak	66	67	68	201	=IF(E6>=200,"A",IF(E6>=198,"B",IF(E6>=192,"C","FAIL")))	A
7	Akash	67	68	69	204	=IF(E7>=200,"A",IF(E7>=198,"B",IF(E7>=192,"C","FAIL")))	A

ex:-2

	A	B	C	D	E	F	
1	Name	Hindi	Math	Science	Total	IF (PASS/FAIL)	result
2	Amitesh	62	63	64	189	=IF(E2>=196,"PASS","FAIL")	FAIL
3	Suresh	63	64	65	192	=IF(E3>=196,"PASS","FAIL")	FAIL
4	Mithlesh	64	65	66	195	=IF(E4>=196,"PASS","FAIL")	FAIL
5	Suraj	65	66	67	198	=IF(E5>=196,"PASS","FAIL")	PASS
6	Deepak	66	67	68	201	=IF(E6>=196,"PASS","FAIL")	PASS
7	Akash	67	68	69	204	=IF(E7>=196,"PASS","FAIL")	PASS

AGHE COMPUTER CENTRE

2. ifs:

Definition: Returns one value based on multiple conditions in a range.

Syntax: =ifs(test 1, result 1, test2 , result 2…….)

	A	B	C	D	E	F	
1	Name	Hindi	Math	Science	Total	IFS (GRADE)	result
2	Amitesh	62	63	64	189	=IFS(E2>=200,"A",E2>=198,"B",E2>=192,"C",E2<192,"FAIL")	FAIL
3	Suresh	63	64	65	192	=IFS(E3>=200,"A",E3>=198,"B",E3>=192,"C",E3<192,"FAIL")	C
4	Mithlesh	64	65	66	195	=IFS(E4>=200,"A",E4>=198,"B",E4>=192,"C",E4<192,"FAIL")	C
5	Suraj	65	66	67	198	=IFS(E5>=200,"A",E5>=198,"B",E5>=192,"C",E5<192,"FAIL")	B
6	Deepak	66	67	68	201	=IFS(E6>=200,"A",E6>=198,"B",E6>=192,"C",E6<192,"FAIL")	A
7	Akash	67	68	69	204	=IFS(E7>=200,"A",E7>=198,"B",E7>=192,"C",E7<192,"FAIL")	A

3. and:

Definition: Returns TRUE if all its arguments are TRUE; returns FALSE otherwise.

Syntax: =and(logical value 1, logical value 2……..)

BAGHEL COMPUTER CENTRE

	A	B	C	D	E	F	
1	Name	Hindi	Math	Science	Total	And	result
2	Amitesh	62	63	64	189	=AND(D2>=65,E2>=195)	FALSE
3	Suresh	63	64	65	192	=AND(D3>=65,E3>=195)	FALSE
4	Mithlesh	64	65	66	195	=AND(D4>=65,E4>=195)	TRUE
5	Suraj	65	66	67	198	=AND(D5>=65,E5>=195)	TRUE
6	Deepak	66	67	68	201	=AND(D6>=65,E6>=195)	TRUE
7	Akash	67	68	69	204	=AND(D7>=65,E7>=195)	TRUE

4. or:

Definition: Returns TRUE if any of its arguments are TRUE; returns FALSE otherwise.

	A	B	C	D	E	F	
1	Name	Hindi	Math	Science	Total	OR	result
2	Amitesh	62	63	64	189	=OR(D2>=65,E2>=195)	FALSE
3	Suresh	63	64	65	192	=OR(D3>=65,E3>=195)	TRUE
4	Mithlesh	64	65	66	195	=OR(D4>=65,E4>=195)	TRUE
5	Suraj	65	66	67	198	=OR(D5>=65,E5>=195)	TRUE
6	Deepak	66	67	68	201	=OR(D6>=65,E6>=195)	TRUE
7	Akash	67	68	69	204	=OR(D7>=65,E7>=195)	TRUE

Syntax: =or(logical value 1, logical value 2……..)

BAGHEL COMPUTER CENTRE

Lookup function

1. vlookup:

Definition: Searches for a value in the leftmost column of a table and returns a value in the same row from a specified column.

Syntax: =vlookup(search criterion, array ,index, shorted range lookup)

	A	B	C	D	E	F	G
1	Cu Id	Name	Product	Price	Qty	Total	
2	101	Akash	Toy	10	2	20	
3	102	Saif	Pen	20	6	120	
4	103	Tajinder	Book	30	5	150	
5	104	Robert	Car	40	6	240	
6	105	Sulekha	Pencil	50	8	400	
7	106	Sakshi	Eraser	60	4	240	
8							
9			Cu id	Column	Vlookup		
10			103	3	=VLOOKUP(C10,A2:F7,D10,0)		

COMPUTER CENTRE

2. hlookup:

Definition: Searches for a value in the top row of a table and returns a value in the same column from a specified row.

Syntax: =hlookup(search criterion, array ,index, shorted range lookup)

	A	B	C	D	E	F	G
13	**Cu Id**	101	102	103	104	105	106
14	**Name**	Akash	Saif	Tajinder	Robert	Sulekha	Sakshi
15	**Product**	Toy	Pen	Book	Car	Pencil	Eraser
16	**Price**	10	20	30	40	50	60
17	**Qty**	2	6	5	6	8	4
18	**Total**	20	120	150	240	400	240
19							
20							
21			**Cu Id**	**Row**	**Hlookup**		
22			103	3	=HLOOKUP(C22,B13:G18,D22,0)		

BAGHDAD COMPUTER CENTRE

Database function

A database function refers to a set of functions used for managing and manipulating data in databases or data ranges. These functions are primarily used for tasks such as filtering, sorting, summarizing, and analyzing data.

These functions are primarily used for tasks such as filtering, sorting, summarizing, and analyzing data.

syntax:

=dsum / daverage / dcount / dmin / dmax / dproduct / dget (database,database field, search criterion)

BAGHEL COMPUTER CENTRE

	A	B	C	D	E
1	**Cu Id**	**Product**	**Price**	**Qty**	**Total**
2	101	Toy	10	2	20
3	102	Pen	20	6	120
4	103	Book	30	5	150
5	104	Toy	40	6	240
6	105	Pen	50	8	400
7	106	Book	60	7	420
8					

1. DSUM:

Calculates the sum of values in a database that meet specific criteria.

10		**Dsum**			
11	**Cu Id**	**Product**	**Price**	**Qty**	**Total**
12		book	>=30	>=5	=DSUM(A1:E7,E1,A11:D12)
13					
14					**Ans=570**

BASEL COMPUTER

2. DAVERAGE:

Calculates the average of values in a database that meet specific criteria.

	A	B	C	D	E	F	G
28		Daverage					
29	Cu Id	Product	Price	Qty	Total		
30		book	>=30	>=5	=DAVERAGE(A1:E7,E1,A29:D30)		
31							
32					Ans=285		

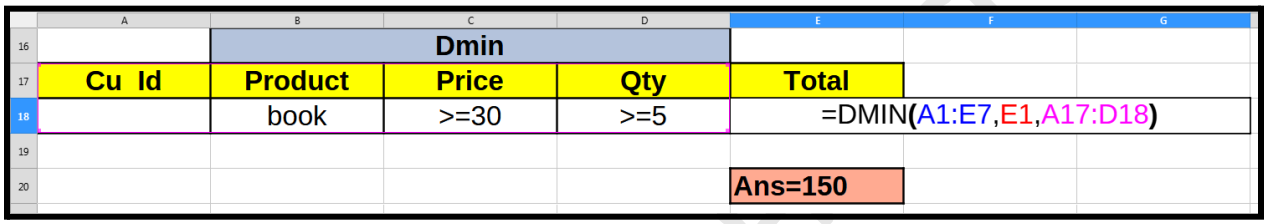
3. DCOUNT:

Counts the number of cells that contain numbers in a database that meet specific criteria.

	A	B	C	D	E	F	G
40		Dcount					
41	Cu Id	Product	Price	Qty	Total		
42		book	>=30	>=5	=DCOUNT(A1:E7,E1,A41:D42)		
43							
44					Ans=2		

4. DMIN:

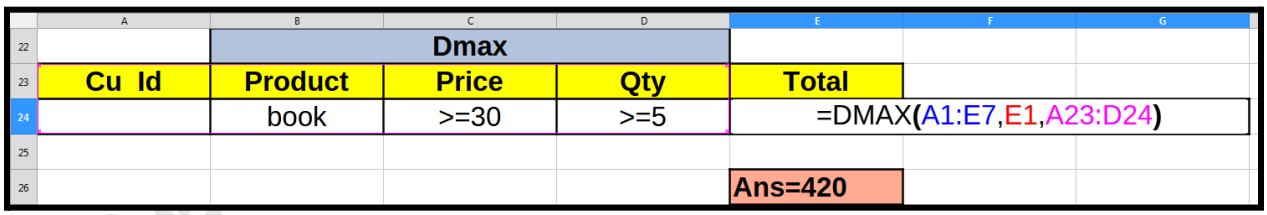
Returns the minimum value in a database that meets specific criteria.



	A	B	C	D	E	F	G
16		Dmin					
17	Cu Id	Product	Price	Qty	Total		
18		book	>=30	>=5	=DMIN(A1:E7,E1,A17:D18)		
19							
20					Ans=150		

5. DMAX:

Returns the maximum value in a database that meets specific criteria.



	A	B	C	D	E	F	G
22		Dmax					
23	Cu Id	Product	Price	Qty	Total		
24		book	>=30	>=5	=DMAX(A1:E7,E1,A23:D24)		
25							
26					Ans=420		

6. DPRODUCT:

Calculates the product of values in a database that meet specific criteria.

	A	B	C	D	E	F	G
34		Dproduct					
35	Cu Id	Product	Price	Qty	Total		
36		book	>=30	>=5	=DPRODUCT(A1:E7,E1,A35:D36)		
37							
38					Ans=63000		

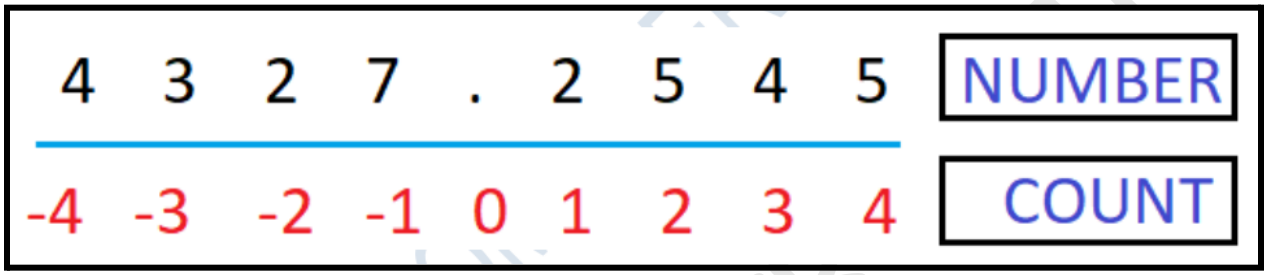
7. DGET:

Retrieves a single value from a database based on specified criteria.

	A	B	C	D	E	F	G
46		Dget					
47	Cu Id	Product	Price	Qty	Total		
48		book	30	5	150		
49							
50					Ans=150		

ED COMPUTER CENTRE

Round series



1. ROUND:

- **Definition:** Rounds a number to a specified number of digits.

- **Syntax:** =ROUND(number, count)

Note:-

1-first we can check, if the number varies between 0-4 or 5-9.

2- if the number varies between 0-4 then it makes the value 0.

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3- if the number varies between 5-9 then it makes the 1 value up .

4-on the left side of (0)- it check the current value and changes the adjacent no.

5-on the right side of (0)- it check the adjacent reference and changes itself.

INPUT

	A	B	C
1	Number	Count	Round
2	4327.2545	0	=ROUND(A2,B2)
3	4327.2545	1	=ROUND(A3,B3)
4	4327.2545	2	=ROUND(A4,B4)
5	4327.2545	3	=ROUND(A5,B5)
6	4327.2545	-3	=ROUND(A6,B6)
7	4327.2545	-2	=ROUND(A7,B7)
8	4327.2545	-1	=ROUND(A8,B8)

OUTPUT

	A	B	C
1	Number	Count	Round
2	4327.2545	0	4327
3	4327.2545	1	4327.3
4	4327.2545	2	4327.25
5	4327.2545	3	4327.255
6	4327.2545	-3	4000
7	4327.2545	-2	4300
8	4327.2545	-1	4330

2. ROUNDUP:

- **Definition:** Rounds a number up, away from zero, to a specified number of digits.

- **Syntax:** =ROUNDUP(number, count)

INPUT

	A	B	C
1	Number	Count	Round-UP
2	4327.2545	0	=ROUNDUP(A2,B2)
3	4327.2545	1	=ROUNDUP(A3,B3)
4	4327.2545	2	=ROUNDUP(A4,B4)
5	4327.2545	3	=ROUNDUP(A5,B5)
6	4327.2545	-3	=ROUNDUP(A6,B6)
7	4327.2545	-2	=ROUNDUP(A7,B7)
8	4327.2545	-1	=ROUNDUP(A8,B8)

OUTPUT

	A	B	C
1	Number	Count	Round-UP
2	4327.2545	0	4328
3	4327.2545	1	4327.3
4	4327.2545	2	4327.26
5	4327.2545	3	4327.255
6	4327.2545	-3	5000
7	4327.2545	-2	4400
8	4327.2545	-1	4330

3. ROUNDDOWN:

- **Definition:** Rounds a number down, towards zero, to a specified number of digits.

- **Syntax:** =ROUNDDOWN/TRUNC(number, count)

4. Trunc: (alternative function name of rounddown)

- **Definition:** Rounds a number down, towards zero, to a specified number of digits.

- **Syntax:** =Trunc(number, count)

INPUT

	A	B	C
1	Number	Count	Round-DOWN
2	4327.2545	0	=ROUNDDOWN(A2,B2)
3	4327.2545	1	=ROUNDDOWN(A3,B3)
4	4327.2545	2	=ROUNDDOWN(A4,B4)
5	4327.2545	3	=ROUNDDOWN(A5,B5)
6	4327.2545	-3	=ROUNDDOWN(A6,B6)
7	4327.2545	-2	=ROUNDDOWN(A7,B7)
8	4327.2545	-1	=ROUNDDOWN(A8,B8)

OUTPUT

	A	B	C
1	Number	Count	Round-DOWN
2	4327.2545	0	4327
3	4327.2545	1	4327.2
4	4327.2545	2	4327.25
5	4327.2545	3	4327.254
6	4327.2545	-3	4000
7	4327.2545	-2	4300
8	4327.2545	-1	4320

BAGH COMPUTER CENTRE