

Practical Assignment – 7

Introduction To Excel

(LAB7)

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Introduction:

Excel is a software that is used by many for making spreadsheets that contain data. Using excel we can organize and arrange this data into orders that are desired by the user. In this practical assignment we'll be exploring the functionalities of the Microsoft Excel Home tab, showcasing the different options available, and provide practical examples or datasets to demonstrate their usage. We also find the meaning of different cell references.

Conditional:

- IF

Logical:

- OR
 - AND
 - XOR
 - SWITCH
 - NOT
-

Exercise 1:

Objective: Use the conditional and logical function in the excel sheet for the provided data.

Step 1: Use IF condition formula.

=IF(A2>50,"Yes","No")

Value1	Value2	IF Above 50	(
67	82	Yes	Y
31	176	No	N
98	27	Yes	Y
58	141	Yes	N
68	98	Yes	Y
179	69	Yes	Y
197	23	Yes	Y
100	18	Yes	Y
199	99	Yes	Y
199	62	Yes	Y
184	139	Yes	N
199	93	Yes	Y
60	101	Yes	N
117	120	Yes	N
64	197	Yes	N
73	181	Yes	N
100	17	Yes	Y
60	184	Yes	N
100	44	Yes	Y
30	90	No	N

Step 2: If condition and “AND” logical operator

=IF(AND(A2>50, B2<100), "Yes", "No")

A	B	C	D
Value1	Value2	IF Above 50	(AND) Between 50 and 100
67	82	Yes	Yes
31	176	No	No
98	27	Yes	Yes
58	141	Yes	No
68	98	Yes	Yes
179	69	Yes	Yes
197	23	Yes	Yes
100	18	Yes	Yes
199	99	Yes	Yes
199	62	Yes	Yes
184	139	Yes	No
199	93	Yes	Yes
60	101	Yes	No
117	120	Yes	No
64	197	Yes	No
73	181	Yes	No
100	17	Yes	Yes
60	184	Yes	No
100	44	Yes	Yes
30	90	No	No

Step 3: If condition and “OR” logical operator

=IF(OR(A2>50, B2<100), "Condition met", "None met")

A	B	C	D	E
Value1	Value2	IF Above 50	(AND) Between 50 and 100	OR
67	82	Yes	Yes	Condition met
31	176	No	No	None met
98	27	Yes	Yes	Condition met
58	141	Yes	No	Condition met
68	98	Yes	Yes	Condition met
179	69	Yes	Yes	Condition met
197	23	Yes	Yes	Condition met
100	18	Yes	Yes	Condition met
199	99	Yes	Yes	Condition met
199	62	Yes	Yes	Condition met
184	139	Yes	No	Condition met
199	93	Yes	Yes	Condition met
60	101	Yes	No	Condition met
117	120	Yes	No	Condition met
64	197	Yes	No	Condition met
73	181	Yes	No	Condition met
100	17	Yes	Yes	Condition met
60	184	Yes	No	Condition met
100	44	Yes	Yes	Condition met
30	90	No	No	Condition met

Step 4: If condition and “NOT” logical operator.

=IF(NOT(A2=100), "Not 100", "Exactly 100")

A	B	C	D	E	F	G
Value1	Value2	IF Above 50	(AND) Between 50 and 100	OR	NOT	
67	82	Yes	Yes	Condition met	Not 100	
31	176	No	No	None met	Not 100	
98	27	Yes	Yes	Condition met	Not 100	
58	141	Yes	No	Condition met	Not 100	
68	98	Yes	Yes	Condition met	Not 100	
179	69	Yes	Yes	Condition met	Not 100	
197	23	Yes	Yes	Condition met	Not 100	
100	18	Yes	Yes	Condition met	Exactly 100	
199	99	Yes	Yes	Condition met	Not 100	
199	62	Yes	Yes	Condition met	Not 100	
184	139	Yes	No	Condition met	Not 100	
199	93	Yes	Yes	Condition met	Not 100	
60	101	Yes	No	Condition met	Not 100	
117	120	Yes	No	Condition met	Not 100	
64	197	Yes	No	Condition met	Not 100	
73	181	Yes	No	Condition met	Not 100	
100	17	Yes	Yes	Condition met	Exactly 100	
60	184	Yes	No	Condition met	Not 100	
100	44	Yes	Yes	Condition met	Exactly 100	
30	90	No	No	Condition met	Not 100	

Step 6: If condition and “XOR” logical operator.

=IF(XOR(A2>50, B2<100), "Condition met", "None met")

A	B	C	D	E	F	G	
Value1	Value2	IF Above 50	(AND) Between 50 and 100	OR	NOT	XOR	
67	82	Yes	Yes	Condition met	Not 100	None met	O
31	176	No	No	None met	Not 100	None met	N
98	27	Yes	Yes	Condition met	Not 100	None met	O
58	141	Yes	No	Condition met	Not 100	Condition met	O
68	98	Yes	Yes	Condition met	Not 100	None met	O
179	69	Yes	Yes	Condition met	Not 100	None met	O
197	23	Yes	Yes	Condition met	Not 100	None met	O
100	18	Yes	Yes	Condition met	Exactly 100	None met	O
199	99	Yes	Yes	Condition met	Not 100	None met	O
199	62	Yes	Yes	Condition met	Not 100	None met	O
184	139	Yes	No	Condition met	Not 100	Condition met	O
199	93	Yes	Yes	Condition met	Not 100	None met	O
60	101	Yes	No	Condition met	Not 100	Condition met	O
117	120	Yes	No	Condition met	Not 100	Condition met	O
64	197	Yes	No	Condition met	Not 100	Condition met	O
73	181	Yes	No	Condition met	Not 100	Condition met	O
100	17	Yes	Yes	Condition met	Exactly 100	None met	O
60	184	Yes	No	Condition met	Not 100	Condition met	O
100	44	Yes	Yes	Condition met	Exactly 100	None met	O
30	90	No	No	Condition met	Not 100	Condition met	N

Step 7: If condition and “SWITCH” logical operator.

=SWITCH(C2, "Yes", "Ok", "No", "Not Ok", "Other")

A	B	C	D	E	F	G	H
Value1	Value2	IF Above 50	(AND) Between 50 and 100	OR	NOT	XOR	SWITCH
67	82	Yes	Yes	Condition met	Not 100	None met	Ok
31	176	No	No	None met	Not 100	None met	Not Ok
98	27	Yes	Yes	Condition met	Not 100	None met	Ok
58	141	Yes	No	Condition met	Not 100	Condition met	Ok
68	98	Yes	Yes	Condition met	Not 100	None met	Ok
179	69	Yes	Yes	Condition met	Not 100	None met	Ok
197	23	Yes	Yes	Condition met	Not 100	None met	Ok
100	18	Yes	Yes	Condition met	Exactly 100	None met	Ok
199	99	Yes	Yes	Condition met	Not 100	None met	Ok
199	62	Yes	Yes	Condition met	Not 100	None met	Ok
184	139	Yes	No	Condition met	Not 100	Condition met	Ok
199	93	Yes	Yes	Condition met	Not 100	None met	Ok
60	101	Yes	No	Condition met	Not 100	Condition met	Ok
117	120	Yes	No	Condition met	Not 100	Condition met	Ok
64	197	Yes	No	Condition met	Not 100	Condition met	Ok
73	181	Yes	No	Condition met	Not 100	Condition met	Ok
100	17	Yes	Yes	Condition met	Exactly 100	None met	Ok
60	184	Yes	No	Condition met	Not 100	Condition met	Ok
100	44	Yes	Yes	Condition met	Exactly 100	None met	Ok
30	90	No	No	Condition met	Not 100	Condition met	Not Ok

Result: After doing the steps mentioned above, the result of the functions will be provided.

Exercise 2:

Objective: Demonstrate different LOOKUP functions by using different functions together and provide meaningful insights from them.

Step 1: Lookup function with only two input values.

=LOOKUP(A3,A3:C22)

A	B	C	D	E	F
Value1	Value2	Value3		LookUP #1	
67	82	97		321	
31	176	321		321	
98	27	-44		128	
58	141	224		321	
68	98	128		128	
179	69	-41		-41	
197	23	-151		-151	
100	18	-64		128	
199	99	-1		-75	
199	62	-75		-75	
184	139	94		-41	
199	93	-13		-75	
60	101	142		321	
117	120	123		128	
64	197	330		321	
73	181	289		128	
100	17	-66		128	
60	184	308		321	
100	44	-12		128	

Step 2: LookUP function with three input values.
Third value specifies the range from which the value will be displayed.

=LOOKUP(A4,A3:C21,B3:B21)

Value1	Value2	Value3		LookUP #1		LookUP #2
67	82	97		321		141
31	176	321		321		176
98	27	-44		128		27
58	141	224		224		141
68	98	128		128		184
179	69	-41		-12		44
197	23	-151		-12		44
100	18	-64		-66		44
199	99	-1		-12		44
199	62	-75		-12		44
184	139	94		-12		44
199	93	-13		-12		44
60	101	142		142		101
117	120	123		-12		44
64	197	330		330		184
73	181	289		289		181
100	17	-66		-12		17
60	184	308		308		184
100	44	-12		-12		44

Result: After completing the steps mentioned above, all the required Function's Answers will be displayed.

Meaningful Insights: The LOOKUP function searches for a specific value in a row or column and returns a corresponding value from another range. It's useful for cross-referencing data and works with both exact and approximate matches. LOOKUP supports vector (one-dimensional) or array (multi-dimensional) searches, making it flexible for various data lookup tasks.

Conclusion:

Through this assignment, we learned about the various facets and features of Excel. We put features

like Functions into practical use.
Excel will be a significant part of our
future work, and this assignment
helped us establish a solid
foundation in its basics.