# MICROSOFT EXCEL BY EXAMPLE II: HINTS

#### Exercise 1. Request 4. Using IF predefined function

To display a status based on some criteria use IF function: [Insert - fx]

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	A	В	С	D	E	F	G	H			
	Year of	SEX	AGE	OBES Inse	ert Function	SBP	DBP	НТ		DIABETES	
1	diagnosis	(F/M)		(yes/no)	(yes/no)	(mmHg)	(mmHg)	(yes/ng	(mg/dl)	(yes/no)	
2	2005	F	40	no	yes	90	60		160		
3	2006	F	40	no	no	100	60		210		

Insert Function
Search for a function:
Type a brief description of what you want to do and then click Go
Or select a <u>c</u> ategory: All
Select a functio <u>n</u> :
HEX2OCT A
HOUR
HYPGEOM.DIST HYPGEOMDIST
IF(logical_test,value_if_true,value_if_false) Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.
Help on this function OK Cancel

Example for HT column:

- Click on the cell corresponding to the HT status for the first patient H2 and click on [Insert fx – All - IF]
  - Fill the IF function dialog box as in the image bellow:

Logical_test	OR(F2>=140,G2>=90)		=	FALSE
Value_if_true	"yes"	<b>1</b>	=	"yes"
Value_if_false	"no"	<b>1</b>	=	"no"
			=	"no"
Checks whether a conditio	n is met, and returns one value if Logical_test is any value or e		nd i	"no" another value if FALSE. nat can be evaluated to TRUE or FALSE

The OR operator was used because we have two conditions and if any one condition is accomplished the patient is considering to be with hypertension.

• If Logical test is Invalid, change ";" with ","

Function Arguments						ହ	23	
IF								
Logical_test	OR(F2>=140;G2>=90)	<u>-</u>	Invalid					
Value_if_true	"yes"	<u>-</u>	ves"					
Value_if_false	"no"	<u>-</u>	no"					
Checks whether a conditio	= Invalid Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.							
Ň	<b>'alue_if_true</b> is the value that is re returned. You can ne				E. If or	nitted, 1	TRUE is	
Formula result =								
Help on this function				ОК		Car	icel	

You can used Fill Down options to display the status of all other patients:

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	H2		• (	f <sub>x</sub>	=IF(OR(F2>=	:140,G2>=	G2>=90),"yes","no") Double click in th					k in this corner	
- 24	Α	В	С	D	E	F	G	Н			7	$\square$	
	Year of	SEX	AGE	OBESITY	SMOKING	SBP	DBP	нт	GLYC	E/	AB	ETES	
1	diagnosis	(F/M)	(years)	(yes/no)	(yes/no)	(mmHg)	(mmHg)	(yes/no)	I /	1	(yes	/no)	
2	2005	F	40	no	yes	90	60	no		160			
3	2006	-	40	no	no	100	60		ſ _	210			
A pr	edefined f		is could	be copy	also to the	right, sin	nilar with	filling th	e form	ulas			

## Request 5. Select and copy the data and [Home – Paste – Paster Special – Value and number format]

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#### Request 6.

To move a column:

- Select the column that you want to move.
- Right click and Cut.
- Select the column to the left of which you want to move your column.

• Right click and Insert Cut Cells...

## **Request 7. Working with predefine functions**

To use predefined function:

- Place the mouse in the cell where you want to obtained the result and from Insert menu chouse fx... option and All (under "Or select a category" option)
- From the "Select a function" window chouse the function according with the following table:

Statistics	Name of Predefine Function
<b>Centrality parameters</b>	
Arithmetic mean	=AVERAGE(array)
Median	=MEDIAN(array)
Mode	=MODE(array)
Central value	=(MAX(array)+MIN(array))/2
Geometric mean	=GEOMEAN(array)
Harmonic mean	=HARMEAN(array)
Measures of spread	
Range / Amplitude	=MAX(array)-MIN(array)
Standard deviation	=STDEV(array)
Standard error	=STDEV(array)/SQRT(COUNT(array))
Coefficient of variation	=STDEV(array)/AVERAGE(array)
Measures of symmetry	
Skewness	=SKEW(array)
Kurtosis	=KURT(array)
Measures of localization	n
1 <sup>st</sup> Quartile	=QUARTILE(array,1)
2 <sup>nd</sup> Quartile (median)	=QUARTILE(array,2)
3 <sup>rd</sup> Quartile	=QUARTILE(array,3)
95 <sup>th</sup> Percentile	=PENCERTILE(array,0.95)