

## Faculty of Computers & Information

### Introduction to Computers

Year 2020 / 2021

## Sheet 1

(1) Write a program to read number of seconds & convert to hours, minutes and seconds equivalent.

**Ex.**

Enter a number of seconds: 3690

Equivalent period = 1:01:30

(2) Write a program that allows the user to enter a temperature in degrees Celsius and then display the corresponding degrees Fahrenheit.

**Hint:**

You can convert temperature from degree Celsius to degrees Fahrenheit by multiplying by 9/5 and adding 32.

(3) Write a program that reads an employee gross salary then calculates his net salary after tax reduction.

Gross Salary	Tax
> 2000	15%
>= 1000 and < 2000	10%
Otherwise	No tax

**Ex.**

Enter your gross salary: 1500

Your net salary after tax reduction: 1350

(4) Write a program that raises a number to a positive power.

**Ex:**

Enter a number: 5

Enter a power: 3

Result = 125

(5) Write a program that asks the user to type an integer N and indicates if N is a prime number or not.

(6) Write a program that asks the user to type strictly positive integers. When the user types a negative value the program writes ERROR and asks for typing an other value. When the user types 0, that means the last value has been typed and the program must write the average of the strictly positive integers. If the number of typed values is zero the program writes 'No AVERAGE'.

**Ex.**

Enter a positive integer: 5

Enter a positive integer: -7

Error, Enter a positive integer: 6

Enter a positive integer: 0

Average = 5.5

(7) Write a shell script that reads a number and perform the following

- print the number digits in reverse order.
- Find the sum of its digits.
- Find the average of its digits.