Beni-Suef University **Faculty of Computers and Information**

Academic year (2018-219)

Sheet 6: Introduction to C

Question 1: Write a program that:

1. Prompts the user for 3 integers. The program should then print:
    a) The sum of the integers
    b) The average of the integers
    c) The sum of the squared numbers
    d) The sum of the cube of the numbers
2. Converts a given number of seconds to hours, minutes and seconds.
3. Converts a temperature in Celsius to Fahrenheit according to the formula:
 Fahrenheit Grade= 1.8 X Celsius Grade +32
4. prompts the user for the distance between two cities and in what speed you intend to drive. The program should print the time for the trip.

Question 2: Write a single C statement to accomplish each of the following:

a) Assign the sum of x and y to z and increment the value of x by 1 after the calculation.
b) Decrement the variable x by 1 then subtract it from the variable total.
c) Calculate the remainder after q is divided by divisor and assign the result to q. (*Write this statement in two different ways*).

Question 3: For the following arithmetic expressions, sort its arithmetic operations.

a) A * B + A*(B * D + C * E)
b) A – B + (D + C / (H * K))
c) A * [B + C * (D + E)] / F * (G + H)

Question 4: What is the output of the following program fragment?

```
length = 25;
width = 60;
if (length == 50)
height = 4;
else
height = 8;
printf ("%d %d %d ",length, width,
height);
```

```
float c1=3, c2=4.75, y;
int j=4.88,k=3,n=5.99,m;
n=n+2.55;
n=(n+1)/8+c1+c2
m=4.75+(n+1)/j;
j=(n+2)%m;
k=m%(n+1);
y=(n+k)/(m+j)+c2;
printf ( “j=%d\n”, j);
printf ( “k=%d\n”, k);
printf ( “m=%d\n”, j);
printf ( “n=%d\n”, j);
printf ( “y=%f\n”, k);
```