

ADMAS UNIVERSITY MESKEL CAMPUS
Department of Computer Science
Computer Programming I Individual Assignment

Note:-

- ☛ **Maximum load – 10%**
- ☛ **The assignment should be submitted both in hard copy and PDF format.**
- ☛ **Copying from one another is strictly forbidden.**
- ☛ **Last date for submission should be on 05/12/2016 E.C.**

- 1) Write a program to read a number from the user and display in reverse order.

Sample output

Enter an integer number : 5387

The number is reverse order is : 7835

- 2) Write a program that finds the minimum of three integer numbers.

Sample output

Enter the 1st number : 9

Enter the 2nd number : 4

Enter the 3rd number : 8

The minimum of the three integer number is : 4

- 3) Write a program that reads a grade of a student and displays the following message.

- i. Grade= A → "Excellent"
- ii. Grade= B → "Very Good"
- iii. Grade= C → "Satisfactory"
- iv. Grade= D → "Fair"
- v. Grade= F → "Poor"

Sample output

Enter grade of a student : B

Very Good

- 4) Write a program to solve a quadratic equation: $ax^2 + bx + c = 0$ for the given constants a, b and c.

- 5) Write a program that checks whether a number is prime or not. (i.e A *prime number* is a number that is only divisible by 1 and itself. So, *prime numbers have only two factors, 1 and the number itself*)

Sample output

Enter a number : 7

7 is a prime number

- 6) Write a program to display the first 10 multiples of a given number (i.e. multiple *in math* are the numbers you get when you multiply a certain number by an integer. For example, multiples of 5 are: 5, 10, 15, 20, 25, 30...etc.)

Sample output

Enter a positive integer number : 6

The first 10 multiples of 6 is : 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

- 7) Write a program that can be used to convert a base 10 number in to its binary equivalent.

Sample output

Enter a base 10 number : 15

Its binary equivalent is : 1111

- 8) Write a program that accepts two numbers and an operator from the user and does the arithmetic operation based on the given operator.

Sample output

Enter the first number : 6

Enter the second number : 4

Enter the operator : +

Output : 6 + 4 = 10

- 9) Read a character from the keyboard and:
- Determine if it is an upper case or lower case letter
 - Change the letter into upper case if it is a small case letter and vice versa

Sample output

Enter any character : A

The character is in upper case and its equivalent lower case letter is : a

10) Print the following pattern.

a)

```
  *
 * *
* * * *
* * * * *
* * * * * *
```

b)

```

                                     5
                                4   5
                           3   4   5
                      2   3   4   5
1   2   3   4   5
```