

## Assignment 1

### Programming for Problem Solving 'C' LANGUAGE

#### Dept of Electrial Engineering

1. Find the area and the perimeter of the following Geometric Figures :  
Triangle  
Rectangle  
Kite.
2. Convert  
Fahrenheit temperature into Celsius temperature ,  
Celsius temperature to Fahrenheit temperature.
3. Calculate potential energy of a given body with given inputs:  
M1=23Kg , h=80m ,  
M2=45Kg,h=79m,  
M3=67Kg,h=56m  
g=9.8 m / s<sup>2</sup>
4. Find the real and imaginary roots of a Quadratic Equation.
5. Print the ASCII values of Given Characters:  
A,b,Z,z,1,9,@
6. Write a program to check whether an input is odd or even number.
7. Find maximum and minimum of two numbers using Ternary Operator .
8. Write a program to calculate Total marks of 4 subjects with Maximum 70 in each subject define grade as given below.

<u>Total marks</u>	<u>Grade</u>
<120	F
<150	D
<210	C
<240	B
<270	A
>=270	E

9. Write a program to find out whether it is a leap year or not.

10. Given a section of Code below. What are the line numbers where error exists?  
Rectify the code and print the output.

```

1.#include <stdio.h>
2.#define PI
3.#define circleArea(r) (PI*r*r)
4.int main()
5. {
6. float radius, area;
7. printf("Enter the radius: ");
8. scanf("%f", &radius);
9. area = circleArea(radi);
10. printf("Area = %.2f", area);
11. return 0;
12. }

```

11. Using switch-case write a menu driven program-

```

***      MENU DRIVEN PROGRAM      ***
Enter 1 for ADDITION
Enter 2 for SUBTRACTION
Enter 3 for MULTIPLICATION
Enter 4 for QUOTIENT
Enter 5 for REMAINDER

Enter your option Please:
Enter First Number:
Enter Second Number
Answer is:

```

12. Write a menu driven program to generate the Series

- i) 1, 2, 3, 4, 5, 6,-----.
- ii) 2, 4, 6, 8,  
1, 3, 5, 7, 9, -----.
- iii) 2, 6, 12, 20, 30, 42, -----.( $n+n^2$ )
- iv) 1, 1, 2, 3, 5, 8, -----, n
- v) Display the series:  $1/1! + 2/2! + 3/3! + \dots$  ----- Using Function.

13. Check whether a no. is Prime or not Using Function

14.a) Print Prime number between 1 to 1000

b) Print Fibonacci Series for N Terms.

15. Menu driven program to print pyramid of triangles:

1. Print the triangle:

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

2. Print the triangle:

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

3. Print the triangle:

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

4. Pascals Triangle

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Note : Please submit as early as per your convenience. Document the Assignment properly with

Name :

Roll\_No:

Dept:

Assignment No:

Date of Submission:

Q1 Aim:

Sample Code:

Sample Run:

Q2 Aim

Sample Code:

Sample Run:

Accordingly for the programs ::

Thank You