

## CACS151: C Programming

### Lab Sheet 2

1. WAP to read the age of a candidate and determine whether it is eligible for casting his/her own vote.
2. WAP to accept a coordinate point in a XY coordinate system and determine in which quadrant the coordinate point lies.
3. WAP to read roll no, name and marks of three subjects and calculate the total, percentage and division.
4. WAP to check whether an alphabet is a vowel or consonant.
5. WAP to accept a grade and declare the equivalent description.

Grade	Description
E	Excellent
V	Very Good
G	Good
A	Average
F	Fail

6. WAP which is a Menu-Driven Program to perform a simple calculation.

1-Addition.

2-Substraction.

3-Multiplication.

4-Division.

5-Exit.

7. WAP to read 10 numbers from keyboard and find their sum and average.
8. WAP to display the multiplication table of a given integer.
9. WAP to display the pattern like right angle triangle with a number.

1

12

123

1234

10. WAP to make such a pattern like right angle triangle with number increased by 1.

The pattern like :

1  
2 3  
4 5 6  
7 8 9 10

11. WAP to make such a pattern like a pyramid with numbers increased by 1.

1  
2 3  
4 5 6  
7 8 9 10

12. WAP to display the n terms of square natural number and their sum.

13. WAP to determine whether a given number is prime or not.

14. WAP to display the first n terms of Fibonacci series.

15. WAP to convert a decimal number into binary without using an array.

16. WAP to find HCF (Highest Common Factor) of two numbers.

17. WAP to find the length of a string without using the library function.

18. WAP to print a string in reverse order.

19. WAP to calculate and print the Electricity bill of a given customer. The customer id., name and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer. The charges are as follow:

Unit	Charge/unit
upto 199	@1.20
200 and above but less than 400	@1.50
400 and above but less than 600	@1.80
600 and above	@2.00

If bill exceeds Rs. 400 then a surcharge of 15% will be charged and the minimum bill should be of Rs. 100/-

20. WAP which is a Menu-Driven Program to compute the area of the various geometrical shape.

Input 1 for area of circle

Input 2 for area of rectangle

Input 3 for area of triangle