1. Explain the concept of C programming with its features.
2. A 1st semester IT student wants to write a program in C but faces several problems. It is ordinary for a new programmer to face various problems in his starting days like not being able to think as a programmer or not being able to design the program. He will also have a problem compiling error messages and debugging the program.

If you were assigned to solve this problem then how would you deal with the task? Explain in detail.

1. How would you want to execute that program? Give your own logic regarding the steps needed for proper execution of your program.
2. What do you know about Programming Language? Compare High level programming language with low level programming language.
3. Your friend wants you to display “Hello Texas.” on the screen ten times on a separate line. How will you do it? Explain how **‘**printf**’** and ‘scanf’ works in this program.
4. Write a Program that reads the marks of a student in seven subjects. Then calculate the percentage and determine the division. Use these conditions:

a. Percentage greater than or equal to 80 - Distinction

b. Percentage between 60 and 79 - First Division

c. Percentage between 45 and 59 - Second Division

d. Percentage between 32 and 44 - Third Division

e. Percentage less than or equal to 31 - Fail

#include <stdio.h>

int main()

{

float eng, phy, chem, math, comp;

float total, average, percentage;

/\* Input marks of all five subjects \*/

printf("Enter marks of five subjects: \n");

scanf("%f%f%f%f%f", &eng, &phy, &chem, &math, &comp);

/\* Calculate total, average and percentage \*/

total = eng + phy + chem + math + comp;

average = total / 5.0;

percentage = (total / 500.0) \* 100;

/\* Print all results \*/

printf("Total marks = %.2f\n", total);

printf("Average marks = %.2f\n", average);

printf("Percentage = %.2f", percentage);

return 0;

}

1. Find out the Output of the program below: (assume necessary header files)

#include<stdio.h>

int main()

{

int i=10,j=0;

j=--i + i++ + ++i;

printf("Value of i is %d, Value of j is %d",i,j);

return 0;

}

1. Write a c Program to read three sides of a triangle and check the validity of triangle. Also decide the type of triangle. (Isosceles, equilateral and right-angled triangle)
2. #include <stdio.h>
3. int main()
4. {
5. int side1, side2, side3;
6. /\* Input sides of a triangle \*/
7. printf("Enter three sides of triangle: ");
8. scanf("%d%d%d", &side1, &side2, &side3);
9. if(side1==side2 && side2==side3)
10. {
11. /\* If all sides are equal \*/
12. printf("Equilateral triangle.");
13. }
14. else if(side1==side2 || side1==side3 || side2==side3)
15. {
16. /\* If any two sides are equal \*/
17. printf("Isosceles triangle.");
18. }
19. else
20. {
21. /\* If none sides are equal \*/
22. printf("Scalene triangle.");
23. }
24. return 0;
25. }
26. Discuss about increment & decrement operator. Write a program using it.
27. Explain coding, compilation and execution in C programming Language.
28. Find the output of the following program.

#include<stdio.h>

int main()

{

int a=12;

printf("%d\t%d\t%d\t%d\t",a++,--a,a,++a);

return 0;

}