

Assignment Week-1

Assignment Questions:

1. Write a C program to enter two numbers and perform all arithmetic operations.
2. Write a C program to enter temperature in Celsius and convert it into Fahrenheit.
3. Write a C program to enter the radius of a circle and find its diameter, circumference and area.
4. Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:
Percentage $\geq 90\%$: Grade A
Percentage $\geq 80\%$: Grade B
Percentage $\geq 70\%$: Grade C
Percentage $\geq 60\%$: Grade D
Percentage $\geq 40\%$: Grade E
Percentage $< 40\%$: Grade F
5. Write a C program to check whether an alphabet is vowel or consonant using switch case.

Practice Questions:

1. Write a C program to perform input/output of all basic data types.
2. Write a C program to enter two numbers and find their sum.
3. Write a C program to enter length and breadth of a rectangle and find its perimeter.
4. Write a C program to enter length and breadth of a rectangle and find its area.
5. Write a C program to enter length in centimeter and convert it into meter and kilometer.
6. Write a C program to enter temperature in Fahrenheit and convert to Celsius
7. Write a C program to convert days into years, weeks and days.
8. Write a C program to enter two angles of a triangle and find the third angle.
9. Write a C program to enter the base and height of a triangle and find its area.
10. Write a C program to enter marks of five subjects and calculate total, average and percentage.
11. Write a C program to enter P, T, R and calculate Simple Interest.
12. Write a C program to enter P, T, R and calculate Compound Interest
13. Write a C program to find maximum between two numbers.
14. Write a C program to find maximum between three numbers.
15. Write a C program to check whether a number is negative, positive or zero.

16. Write a C program to check whether a number is divisible by 5 and 11 or not.
17. Write a C program to check whether a number is even or odd.
18. Write a C program to check whether a year is leap year or not.
19. Write a C program to check whether a character is an alphabet or not.
20. Write a C program to input any alphabet and check whether it is vowel or consonant.
21. Write a C program to input any character and check whether it is alphabet, digit or special character.
22. Write a C program to check whether a character is uppercase or lowercase alphabet.
23. Write a C program to input week number and print week day.
24. Write a C program to input the month number and print the number of days in that month.
25. Write a C program to input angles of a triangle and check whether triangle is valid or not.
26. Write a C program to input all sides of a triangle and check whether the triangle is valid or not.
27. Write a C program to check whether the triangle is equilateral, isosceles or scalene triangle.
28. Write a C program to input basic salary of an employee and calculate its Gross salary according to following:
Basic Salary \leq 10000 : HRA = 20%, DA = 80%
Basic Salary \leq 20000 : HRA = 25%, DA = 90%
Basic Salary > 20000 : HRA = 30%, DA = 95%
29. Write a C program to input electricity unit charges and calculate total electricity bill according to the given condition:
For first 50 units Rs. 0.50/unit
For next 100 units Rs. 0.75/unit
For next 100 units Rs. 1.20/unit
For unit above 250 Rs. 1.50/unit
An additional surcharge of 20% is added to the bill
30. Write a C program print the total number of days in a month using switch case.
31. Write a C program to find the maximum between two numbers using switch case.
32. Write a C program to check whether a number is even or odd using switch case.
33. Write a C program to check whether a number is positive, negative or zero using switch case.
34. Write a C program to create a Simple Calculator using switch case.

Achiever Section:

1. Find Output:

```
#include<stdio.h>
int main()
{
    int i = 5, j = 6, k = 7;
    if(i > j == k)
        printf("%d %d %d", i++, ++j, --k);
    else
        printf("%d %d %d", i, j, k);
    return 0;
}
```

A. 5 7 6 B. 5 6 7

C. 6 6 6 D. 5 7 7

2. Find Output

```
#include<stdio.h>
int main()
{
    int i = 2;
    if(i == (1, 2))
        printf("Hai");
    else
        printf("No Hai");
    return 0;
}
```

A. Compilation Error

B. Runtime Error

C. Hai

D. No Hai

3. Find Output

```
#include<stdio.h>

int main()

{

int i = 5;

    if(i = i - 5 > 4)

        printf("inside if block");

    else

        printf("inside else block");

return 0;

}
```

A. Compilation Error

B. None

C. inside if block

D. inside else block

4. Find Output

What will be the output of the C program?

```
#include<stdio.h>

int main()

{

    if(sizeof(0))

        printf("Hai");

    else

        printf("Bye");

    return 0;

}
```

- A. Bye
- B. Hai
- C. Compilation Error
- D. None

5. Find Output

```
#include<stdio.h>

int main()

{
```

```
if(sizeof('\0'))  
  
    printf("inside if block");  
  
else  
  
    printf("inside else block");  
  
return 0;  
  
}
```

- A. inside if block
- B. inside else block
- C. None
- D. Compilation Error