

Lab Assignment 2

Full Marks- 30

1. If a is 15, then what would be the value of:

```
printf("%d",++a);
```

```
printf("%d",a++);
```

```
printf("%d",--a);
```

```
printf("%d",a--);
```

Print the values.

[2 marks]

2. Write a C program to find the maximum of three numbers using only the Ternary operator (?:).

Sample Input:

Input two numbers: 17 -90 12

Sample Output:

Max number is 17

[5 Marks]

3. Write a C program to convert the total number of days into years, months, weeks, and days.

Sample Input:

Enter total number of Days: 890

Sample Output:

Years = 2

Months = 5

Weeks = 1

Days = 3

[5 marks]

4. Write a C program to check whether a given year is a leap year or not.

[5 marks]

5. Determine if a number is odd or even using bitwise and(&) operator.

[3 marks]

6. Write a C program to find if the given number is odd and within the range 100 and 200. (hint: use ternary operator and relational operator)

Sample Input 1:

Input a number: 154

Sample Output 1:

False

Sample Input 2:

Input a number: 139

Sample Output 1:

True

[5 marks]

7. Given the meal price (base cost of a meal), tip percent (the percentage of the meal price being added as tip), and tax percent (the percentage of the meal price being added as tax) for a meal, find and print the meal's total cost. Round the result to the nearest integer.

Example

$$meal_{cost} = 100$$

$$tip_{percent} = 15$$

$$tax_{percent} = 8$$

A tip of $15\% * 100 = 15$, and the taxes are $8\% * 100 = 8$. Print the value 123.

[5 marks]