Problem 1 :

Write a program that takes two integers as input and uses the conditional operator to find and print the maximum of the two numbers.

Input :

```c
#include <stdio.h>

int main() {
    int num1,num2,maximum;
    printf("enter value of number1 :- ");
    scanf("%d",&num1);
    printf("enter value of number2 :- ");
    scanf("%d",&num2);
    maximum = (num1>num2) ? num1:num2;
    printf("maximum number is :- %d \n",maximum);

    return 0;
}
```

Output:

```
enter value of number1 :- 5
enter value of number2 :- 10
maximum number is :- 10
```

Problem 2 :

Write a program to determine if a given year is a leap year. A leap year is either:

1)Divisible by 4 but not divisible by 100, or

2)Divisible by 400

Input :

```c
#include <stdio.h>
int main() {
    int year;
    printf("enter the year :- ");
    scanf("%d",&year);
    if (year%4==0 || year%100==0) {
        printf("the given year is a leap year");
    }
    else if (year%400==0) {
        printf("the given year is a leap year");
    }
    else  {
        printf("the given year is not a leap year");
    }
    return 0;
}
```

Output :

```
enter the year :- 2024
the given year is a leap year
```

Problem 3 :

Write a program that takes an integer as input and checks if it is positive. If it is positive, print "Positive number."

Input :

```c
#include <stdio.h>

int main() {
    int num;
    printf("enter a number to check whether its positive or not :- ");
    scanf("%d",&num);
    if (num>0) {
        printf("the given number is positive");
    }
    else if (num<0) {
        printf("the given number is negative");
    }
    else {
        printf("the number is zero");

    }

    return 0;
}
```

Output :

```
enter a number to check whether its positive or not :- 9
the given number is positive
```

Problem 4 :

Write a program to determine whether a given number is even or odd. Print "Even" if it's even and "Odd" if it's odd.

Input:

```c
#include <stdio.h>

int main() {

    int num;
    printf("enter a number to check whether its even or odd :- ");
    scanf("%d",&num);
    if (num%2==0) {
        printf("the given number is even");
    }
    else if (num%2!=0) {
        printf("the given number is odd");
    }

    return 0;
}
```

Output:

```
enter a number to check whether its even or odd :- 12
the given number is even
```

Problem 5 :

Write a program to determine the grade of a student based on the input percentage. Use the following grading scale:

90 or above: A

80-89: B

70-79: C

60-69: D

Below 60: F

Input :

```c
#include <stdio.h>
int main() {
    int percentage;
    printf("enter the percentage of student :-  ");
    scanf("%d",&percentage);
    if(percentage>=90 && percentage<=100) {
        printf("Grade : A");
    }
    else if (percentage>=80 && percentage<=89) {
        printf("Grade : B");
    }
    else if (percentage>=70 && percentage<=79) {
        printf("Grade : C");
    }
    else if (percentage>=60 && percentage<=69) {
        printf("Grade : D");
    }
    else if (percentage<60) {
        printf("Grade F");
    }
    else {
        printf("enter percentage from 0-100!");
    }
    return 0;
}
```

Output:

```
enter the percentage of student :-  95
Grade : A
```

Problem 6 :

Write a program that reads three numbers and determines and prints the largest number using multiple `if` statements.

Input:

```c
#include <stdio.h>
int main() {
    int num1,num2,num3;
    printf("enter number 1 :- ");
    scanf("%d",&num1);
    printf("enter number 2 :- ");
    scanf("%d",&num2);
    printf("enter number 3 :- ");
    scanf("%d",&num3);
    if(num1>num2 && num1>num3) {
        printf("Number 1 is greater of all!");
    }
    else if(num2>num1 && num2>num3) {
        printf("Number 2 is greater of all!");
    }
    else if(num3>num1 && num3>num2) {
        printf("Number 3 is greater of all!");
    }
    else {
        printf("All are equal!");
    }
    return 0;
}
```

Output:

```
enter number 1 :- 5
enter number 2 :- 10
enter number 3 :- 15
Number 3 is greater of all!
```