PF LAB #02
LAB TASK

1. Generate a random number between 1 and 9 (including 1 and 9). Ask the user to guess the number, then tell them whether they guessed too low, too high, or exactly right.

2. Check whether a year is leap year or not?

Write a C++ program **that ask user to input number**, year, determines whether the year is a leap yea. A year is a leap year if it is divisible by 4, but is not divisible by 100 except when divisible by 400. (The year 2000 was a leap year.) Ask user whether he/she wants to enter more data or not?

```
Sample Run:
This program asks you to enter a year in 4 digits.
The output shows if the year is a leap year
Enter a year: 1492
1492 is a leap year.
Do you want to enter more data? y/n: y
Enter a year: 2000
2000 is a leap year.
Do you want to enter more data? y/n: y
Enter a year: 2005
2005 is not a leap year.
Do you want to enter more data? y/n: y
```

3. A carpet cleaning company estimates cleaning prices assuming a room size of 10 feet by 12 feet at a cost of $39. Rooms smaller than 10 feet by 12 feet are charged at the standard room size. Rooms larger than 10 by 12 feet are charged the standard rate plus $.25 per square foot for each foot greater than the standard room size. Design a program that asks the user for the number of rooms to be cleaned and the size of each room. Calculate the cost of cleaning the rooms.

```
Sample Run:
Enter the number of rooms to be cleaned: 3
Enter the width and length of room 1: 8 10
The cost to clean room 1: $39
Enter the width and length of room 2: 10 12
The cost to clean room 2: $39
Enter the width and length of room 3: 14 16
The cost to clean room 3: $65
The total cost of cleaning 3 room(s): $143
```

4. Write a C++ program that prints all the numbers from 0 to 6 except 3 and 6.
   Expected Output : 0 1 2 4 5

5. 4. Write a C++ program to create the multiplication table (from 1 to 10) of a number.
   Expected Output:

   Input a number: 6
   6 x 1 = 6
   6 x 2 = 12
   6 x 3 = 18
   6 x 4 = 24
   6 x 5 = 30
   6 x 6 = 36
   6 x 7 = 42
   6 x 8 = 48
   6 x 9 = 54
   6 x 10 = 60