

QUESTION 1

Nextline()

The **nextLine()** method of the **Scanner** class is also used for taking input from the user. In order to use the **nextLine()** method, we also need to create an instance of the **Scanner** class. The **nextLine()** method is capable of reading input till the end of the line. So, it stops reading input from the user when the user presses the enter key or line change.

Example:

```
public static void main(String[] args)
{ Scanner sc = new Scanner(System.in);
  System.out.println("enter string")
  String Input = sc.nextLine();
  System.out.println("String"+Input);
```

Input:

Enter string Great Pakistan

Output:

Enter string Great Pakistan
String Great Pakistan

Next()

The **next()** method of the **Scanner** class is used for getting input from the user. In order to use the **next()** method of the **Scanner** class, an instance of the **Scanner** class needs to be created. The **next()** method stops reading input from the user until it receives a white space(" "). So, it returns the next complete token from the **Scanner**.

Example:

```
public static void main(String[] args)
{ Scanner sc = new Scanner(System.in);
  System.out.println("enter string")
  String Input = sc.next();
  System.out.println("String"+Input);
```

Input:

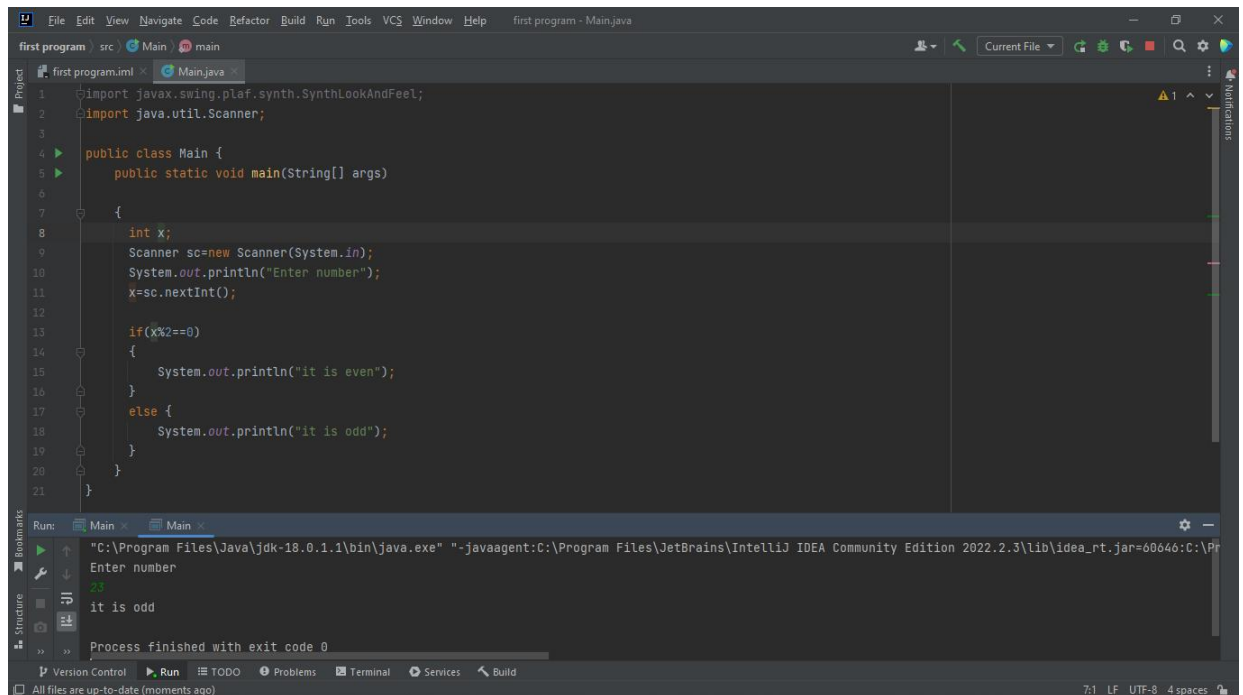
Enter string Great Pakistan

Output:

Enter string Great Pakistan
String Great

QUESTION 2

Take a number from the user and check if it is even or odd

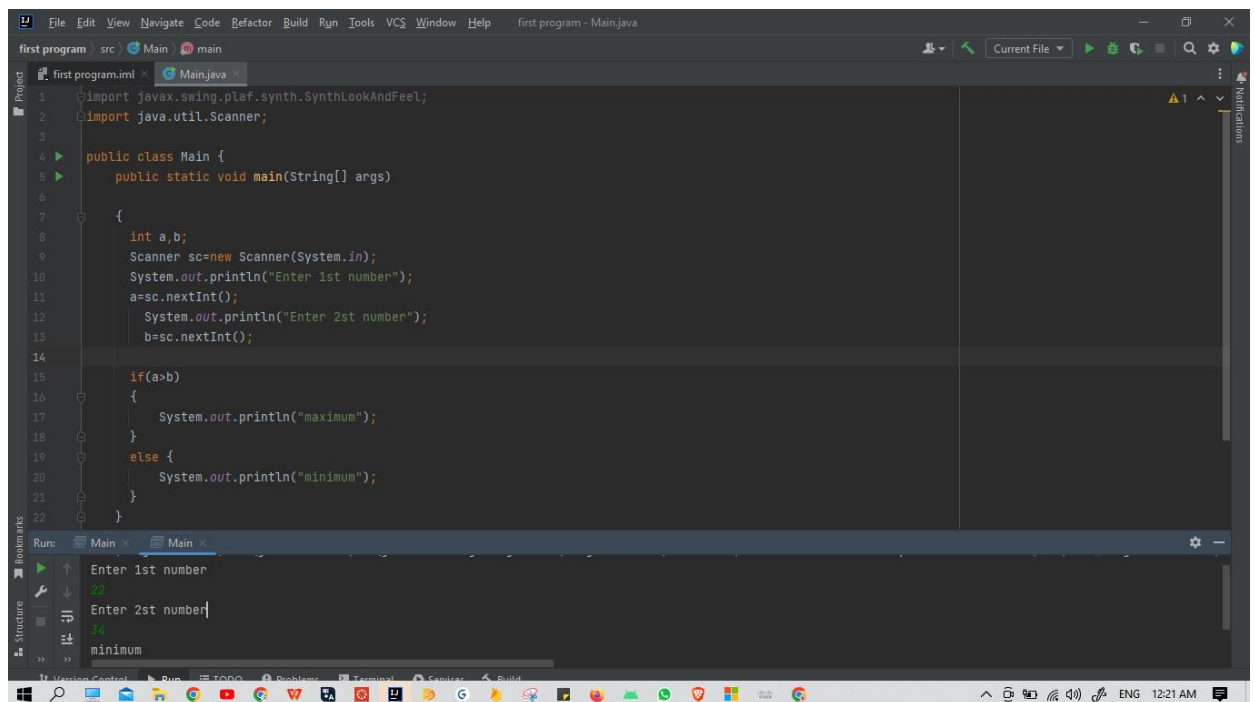


```
1 import javax.swing.plaf.synth.SynthLookAndFeel;
2 import java.util.Scanner;
3
4 public class Main {
5     public static void main(String[] args)
6     {
7         int x;
8         Scanner sc=new Scanner(System.in);
9         System.out.println("Enter number");
10        x=sc.nextInt();
11
12        if(x%2==0)
13        {
14            System.out.println("it is even");
15        }
16        else {
17            System.out.println("it is odd");
18        }
19    }
20 }
21 }
```

Run: Main x Main x
"C:\Program Files\Java\jdk-18.0.1.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.3\lib\idea_rt.jar=60646:C:\Pr
Enter number
23
it is odd
Process finished with exit code 0

QUESTION 3

Code of printing the big number

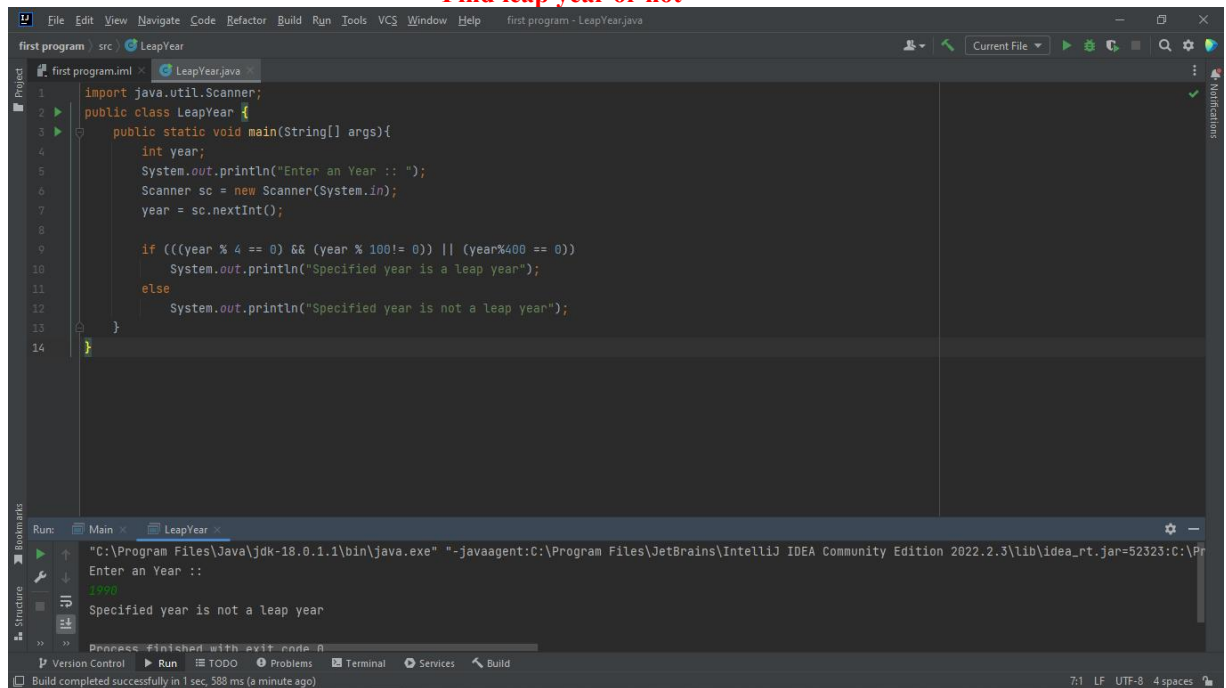


```
1 import javax.swing.plaf.synth.SynthLookAndFeel;
2 import java.util.Scanner;
3
4 public class Main {
5     public static void main(String[] args)
6     {
7         int a,b;
8         Scanner sc=new Scanner(System.in);
9         System.out.println("Enter 1st number");
10        a=sc.nextInt();
11        System.out.println("Enter 2st number");
12        b=sc.nextInt();
13
14        if(a>b)
15        {
16            System.out.println("maximum");
17        }
18        else {
19            System.out.println("minimum");
20        }
21    }
22 }
```

Run: Main x Main x
Enter 1st number
22
Enter 2st number
34
minimum

QUESTION 4

Find leap year or not



```
1 import java.util.Scanner;
2 public class LeapYear {
3     public static void main(String[] args){
4         int year;
5         System.out.println("Enter an Year :: ");
6         Scanner sc = new Scanner(System.in);
7         year = sc.nextInt();
8
9         if (((year % 4 == 0) && (year % 100 != 0)) || (year % 400 == 0))
10             System.out.println("Specified year is a leap year");
11         else
12             System.out.println("Specified year is not a leap year");
13     }
14 }
```

Run: Main x LeapYear x

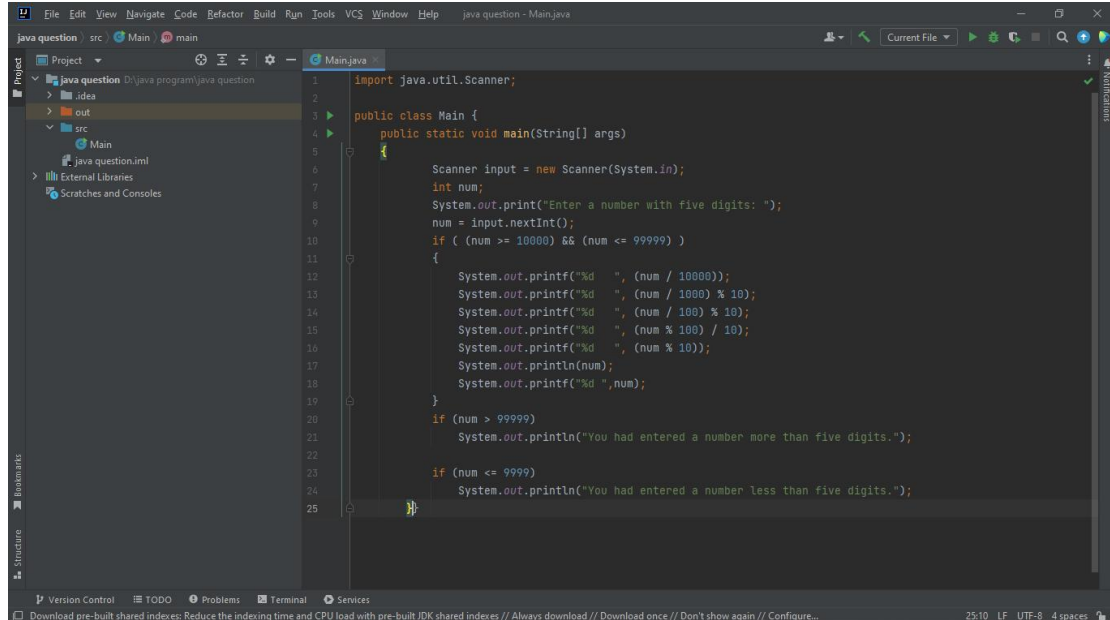
```
"C:\Program Files\Java\jdk-18.0.1.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2.3\lib\idea_rt.jar=52323:C:\Pr
Enter an Year ::
1990
Specified year is not a leap year
```

Build completed successfully in 1 sec, 388 ms (a minute ago)

Question 6

Write an application that inputs one number consisting of five digits from the user, separates
* the number into its individual digits and prints the digits separated from one another by three
* spaces each.

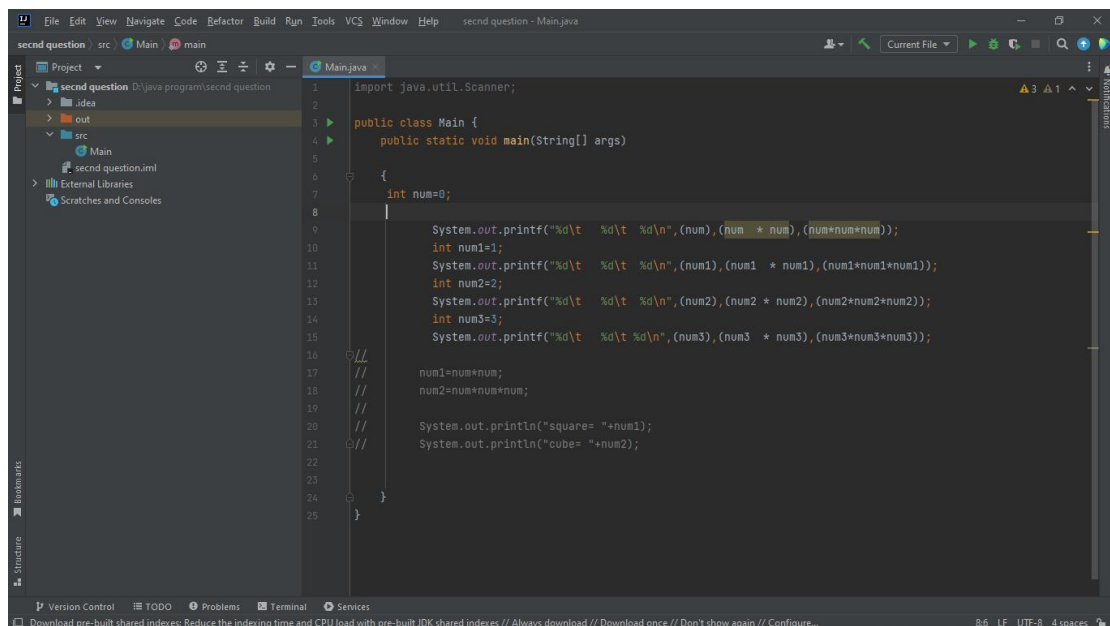
* For example, if the user types in the number 42339, the program should print
* 4 2 3 3 9



```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args)
5     {
6         Scanner input = new Scanner(System.in);
7         int num;
8         System.out.print("Enter a number with five digits: ");
9         num = input.nextInt();
10        if ( (num >= 10000) && (num <= 99999) )
11        {
12            System.out.printf("%d ", (num / 10000));
13            System.out.printf("%d ", (num / 1000) % 10);
14            System.out.printf("%d ", (num / 100) % 10);
15            System.out.printf("%d ", (num % 100) / 10);
16            System.out.printf("%d ", (num % 10));
17            System.out.println(num);
18            System.out.printf("%d ", num);
19        }
20        if (num > 99999)
21            System.out.println("You had entered a number more than five digits.");
22        if (num <= 9999)
23            System.out.println("You had entered a number less than five digits.");
24    }
25 }
```

Question 7

Is question mein ap value enter karty ho and us kah square and cube nikal kar ata ha



```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args)
5     {
6         int num=0;
7
8         System.out.printf("%d\t %d\t %d\n", (num), (num * num), (num*num*num));
9
10        int num1=1;
11        System.out.printf("%d\t %d\t %d\n", (num1), (num1 * num1), (num1*num1*num1));
12        int num2=2;
13        System.out.printf("%d\t %d\t %d\n", (num2), (num2 * num2), (num2*num2*num2));
14        int num3=3;
15        System.out.printf("%d\t %d\t %d\n", (num3), (num3 * num3), (num3*num3*num3));
16
17        //
18        num1=num+num;
19        //
20        num2=num+num;
21        //
22        System.out.println("square= "+num1);
23        System.out.println("cube= "+num2);
24    }
25 }
```

Question 8

A shop will give discount of 10% if the cost of purchased quantity is more than 1000. Ask user for quantity

Suppose, one unit will cost 100.

Judge and print total cost for user. in java

```
package com.company;
import java.util.Scanner;
class test
{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the quantity: ");
        double n = sc.nextDouble();
        if (n > 1000) {
            System.out.println("The total cost = " + (n - (n / 100 * 10)));
        }
        else {
            System.out.println("The total cost = " + n);
        }
    }
}
```

Question 9

Program to print absolute value

```
public class Example {
    public static void main(String[] args) {
        float value1 = -5.67f;
        long value2 = -654L;

        System.out.println(Math.abs(value1));
        System.out.println(Math.abs(value2));
    }
}
```