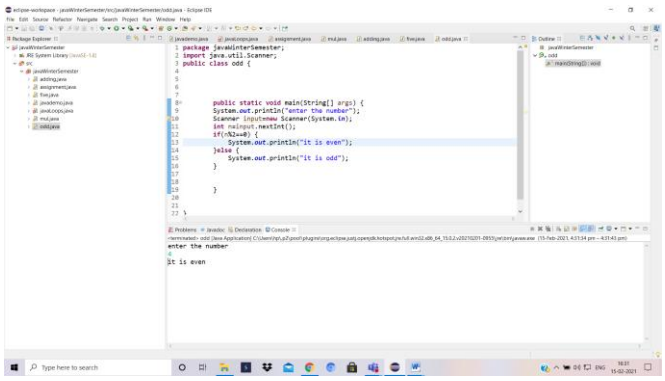
1.
```
package javaWinterSemester;
import java.util.Scanner;
public class odd {



	public static void main(String[] args) {
	System.out.println("enter the number");
	Scanner input=new Scanner(System.in);
	int n=input.nextInt();
	if(n%2==0) {
		System.out.println("it is even");
	}else {
		System.out.println("it is odd");
	}


	}


}
```

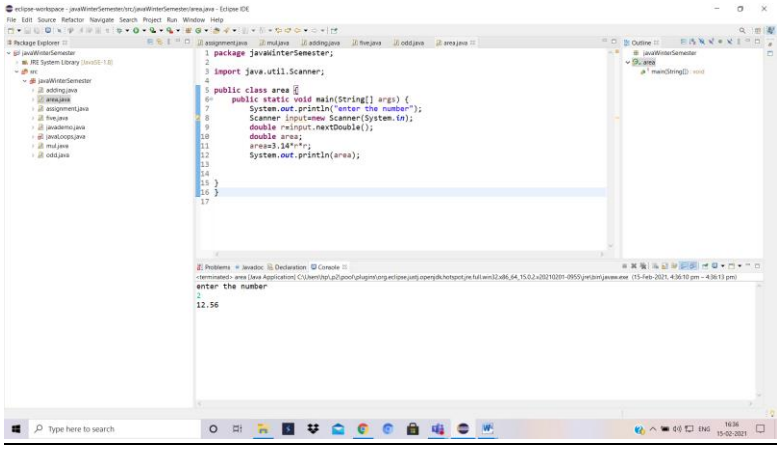
OUTPUT:



2.
```
package javaWinterSemester;

import java.util.Scanner;

public class area {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		double r=input.nextDouble();
		double area;
		area=3.14*r*r;
```

```
            System.out.println(area);


}
}
```

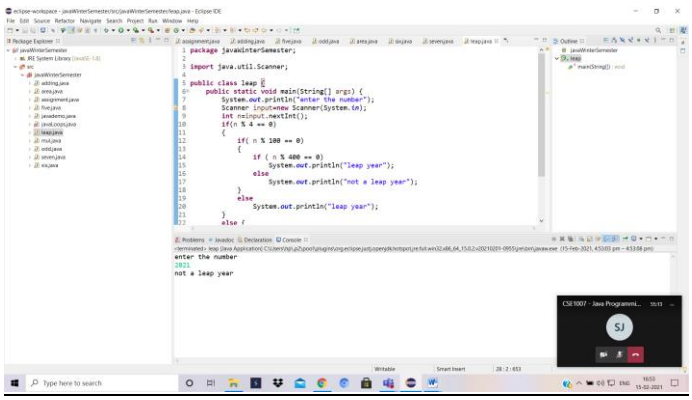
OUTPUT



3.
```
package javaWinterSemester;

import java.util.Scanner;

public class leap {
      public static void main(String[] args) {
            System.out.println("enter the number");
            Scanner input=new Scanner(System.in);
            int n=input.nextInt();
            if(n % 4 == 0)
          {
               if( n % 100 == 0)
               {
                    if ( n % 400 == 0)
                     System.out.println("leap year");
                    else
                     System.out.println("not a leap year");
               }
               else
                    System.out.println("leap year");
          }
          else {
              System.out.println("not a leap year");
          }


}
```

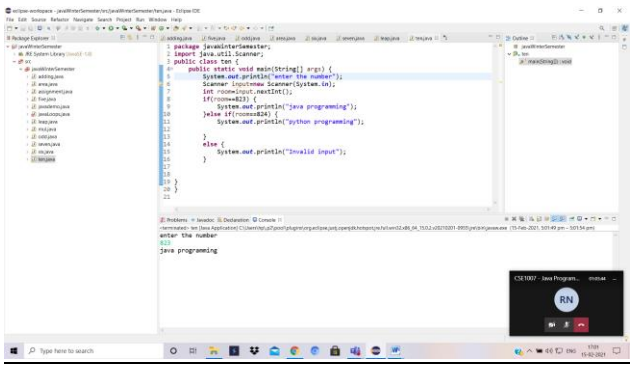
}

OUTPUT:



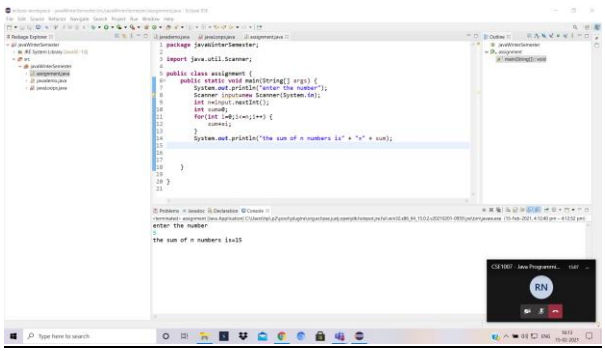
4.
```
package javaWinterSemester;
import java.util.Scanner;
public class ten {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		int room=input.nextInt();
		if(room==823) {
			System.out.println("java programming");
		}else if(room==824) {
			System.out.println("python programming");

		}
		else {
			System.out.println("Invalid input");
		}


}
}
```

OUTPUT:



5.
```
package javaWinterSemester;

import java.util.Scanner;

public class assignment {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		int n=input.nextInt();
		int sum=0;
		for(int i=0;i<=n;i++) {
			sum+=i;
		}
		System.out.println("the sum of n numbers is" + "=" +
sum);



	}

}
```

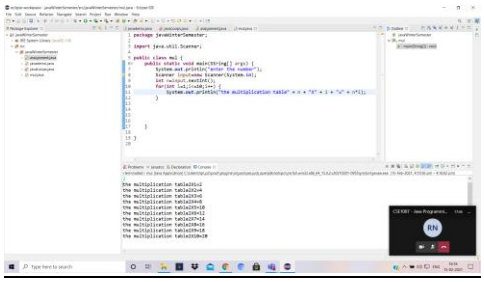
OUTPUT:



6.
```
package javaWinterSemester;

import java.util.Scanner;

public class mul {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		int n=input.nextInt();
		for(int i=1;i<=10;i++) {
			System.out.println("the multiplication table" + n +
"X" + i + "=" + n*i);
		}
```

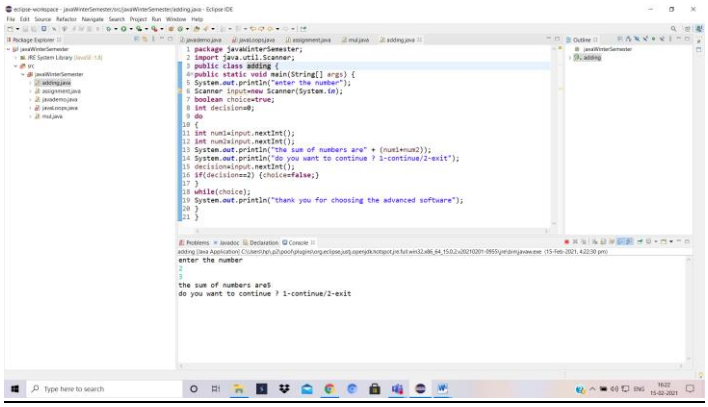
```
        }

}
```

OUTPUT:



7.
```
package javaWinterSemester;
import java.util.Scanner;
public class adding {
public static void main(String[] args) {
System.out.println("enter the number");
Scanner input=new Scanner(System.in);
boolean choice=true;
int decision=0;
do
{
int num1=input.nextInt();
int num2=input.nextInt();
System.out.println("the sum of numbers are" + (num1+num2));
System.out.println("do you want to continue ? 1-continue/2-exit");
decision=input.nextInt();
if(decision==2) {choice=false;}
}
while(choice);
System.out.println("thank you for choosing the advanced software");
}
}
```

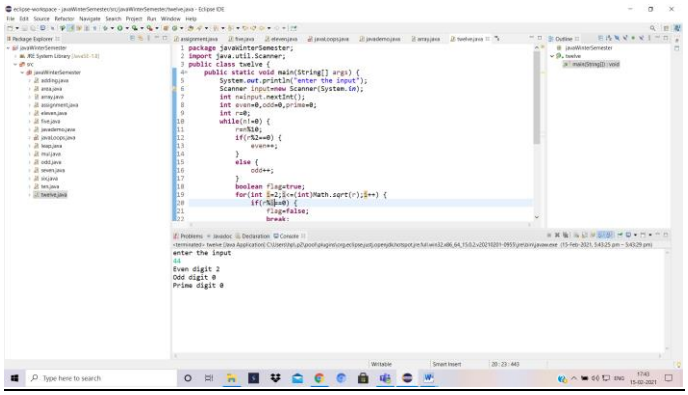
OUTPUT:



8.
```java
package javaWinterSemester;
import java.util.Scanner;
public class twelve {
	public static void main(String[] args) {
		System.out.println("enter the input");
		Scanner input=new Scanner(System.in);
		int n=input.nextInt();
		int even=0,odd=0,prime=0;
		int r=0;
		while(n!=0) {
			r=n%10;
			if(r%2==0) {
				even++;
			}
			else {
				odd++;
			}
			boolean flag=true;
			for(int i=2;i<=(int)Math.sqrt(r);i++) {
				if(r%i==0) {
					flag=false;
					break;
				}

			}
			if(flag==true && r!=1)
				prime++;


			n=n/10;
		}
		System.out.println("Even digit "+even);
		System.out.println("Odd digit "+odd);
		System.out.println("Prime digit "+prime);
	}
```

}

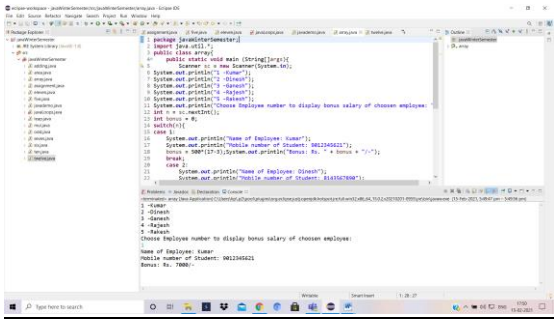
OUTPUT



9.
```
package javaWinterSemester;
import java.util.*;
public class array{
	public static void main (String[]args){
		Scanner sc = new Scanner(System.in);
System.out.println("1 -Kumar");
System.out.println("2 -Dinesh");
System.out.println("3 -Ganesh");
System.out.println("4 -Rajesh");
System.out.println("5 -Rakesh");
System.out.println("Choose Employee number to display bonus salary
of choosen employee: ");
int n = sc.nextInt();
int bonus = 0;
switch(n){
case 1:
	System.out.println("Name of Employee: Kumar");
	System.out.println("Mobile number of Student: 9012345621");
	bonus = 500*(17-3);System.out.println("Bonus: Rs. " + bonus +
"/-");
	break;
	case 2:
		System.out.println("Name of Employee: Dinesh");
		System.out.println("Mobile number of Student:
8143567890");
		bonus = 500*(7-3);System.out.println("Bonus: Rs. " +
bonus + "/-");
		break;
		case 3: System.out.println("Name of Employee: Ganesh");
		System.out.println("Mobile number of Student:
7114567213");
		bonus = 500*(13-3);System.out.println("Bonus: Rs. " +
bonus + "/-");
		break;
```

```
            case 4:
                  System.out.println("Name of Employee: Rajesh");
                  System.out.println("Not eligible for bonus");
                 break;
           case 5:
                  System.out.println("Name of Employee: Rakesh");
                  System.out.println("Mobile number of Student:
8159056784");
                  bonus = 500*(9-3);System.out.println("Bonus: Rs. "
+ bonus + "/-");
                  break;
            default:
                  System.out.println("Invalid Choice");
                  break;
}
}
}
```

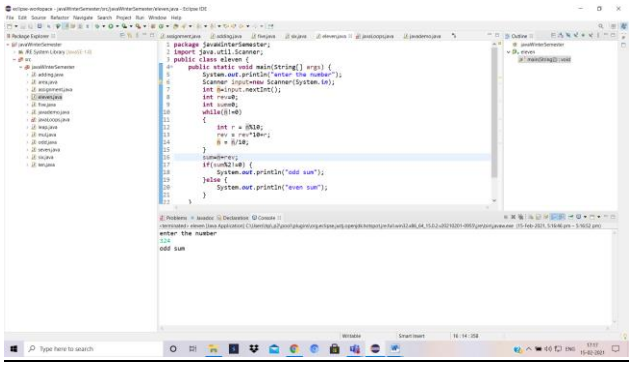
OUTPUT:



10.
```
package javaWinterSemester;
import java.util.Scanner;
public class eleven {
      public static void main(String[] args) {
            System.out.println("enter the number");
            Scanner input=new Scanner(System.in);
            int n=input.nextInt();
            int rev=0;
            int sum=0;
            while(n!=0)
            {
                  int r = n%10;
                  rev = rev*10+r;
                  n = n/10;
            }
            sum=n+rev;
            if(sum%2!=0) {
                  System.out.println("odd sum");
            }else {
                  System.out.println("even sum");
```

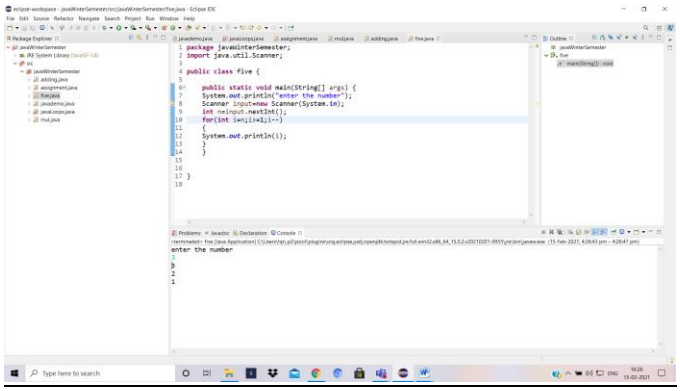
```
            }
        }

}
```

OUTPUT



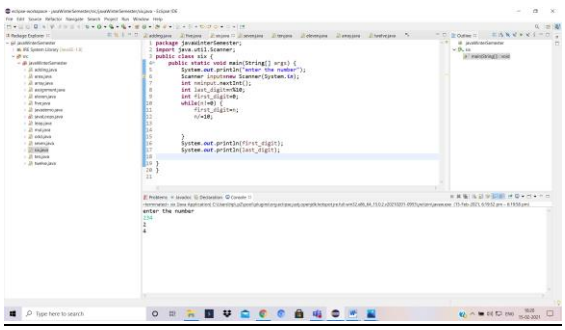
11.
```
package javaWinterSemester;
import java.util.Scanner;

public class five {

        public static void main(String[] args) {
        System.out.println("enter the number");
        Scanner input=new Scanner(System.in);
        int n=input.nextInt();
        for(int i=n;i>=1;i--)
        {
        System.out.println(i);
        }
        }


}
```

OUTPUT:



12.
```java
package javaWinterSemester;
import java.util.Scanner;
public class six {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		int n=input.nextInt();
		int last_digit=n%10;
		int first_digit=0;
		while(n!=0) {
			first_digit=n;
			n/=10;


		}
		System.out.println(first_digit);
		System.out.println(last_digit);

}
}
```

OUTPUT:



13.
```java
package javaWinterSemester;
import java.util.Scanner;
```

```java
public class seven {
	public static void main(String[] args) {
		System.out.println("enter the number");
		Scanner input=new Scanner(System.in);
		int n=input.nextInt();
		int every_digit=0;
		int sum=0;
		while(n!=0) {
		every_digit=n%10;
		sum=sum+every_digit;
		n=n/10;
		}
		System.out.println("the sum of digit of" + n + "is =" +
sum);
		}


}
```

OUTPUT: