

```
/*1.Write a program that prompts the user to input a positive integer.  
It should then output a message indicating whether the number is a prime  
number. */
```

```
import java.util.Scanner;  
  
public class Prime {  
  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
        int a,b,i,count=0;  
        boolean prime=false;  
        System.out.println("Enter a number");  
        Scanner scanner=new Scanner(System.in);  
        b=scanner.nextInt();  
        if(b==0||b==1) {  
            System.out.println("it is not prime no");  
        }  
        else {  
            for(i=2;i<=b-1;i++) {  
                if(b%i==0) {  
                    count++;  
                }  
            }  
            if(count==0) {  
                System.out.println("is Prime no");  
            }  
            else {  
                System.out.println("Not prime no");  
            }  
        }  
    }  
}
```

```
Enter a number  
3  
is Prime no
```

```
/*2.Write a program that prompts the user to input a positive integer.  
It should then print the multiplication table of that number. */
```

```
import java.util.Scanner;  
  
public class Multiplication {  
  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
        int b;  
        System.out.println("Enter the Number");  
        Scanner scanner=new Scanner(System.in);
```

```

b=scanner.nextInt();
for(int i=1;i<=10;i++) {
    System.out.println(b+"*"+i+"="+b*i);
}
}
}

```

```

Enter the Number
5
5*1=5
5*2=10
5*3=15
5*4=20
5*5=25
5*6=30
5*7=35
5*8=40
5*9=45
5*10=50

```

```

/*
 * 3.A student will not be allowed to sit in exam if his/her attendance is
less than 75%.
Take following input from user

Number of classes held
Number of classes attended.
And print
percentage of class attended
Is student is allowed to sit in exam or not.
*/

```

```

import java.util.Scanner;

public class Attendance {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        float a,b,c;

Scanner scanner=new Scanner(System.in);
System.out.println("Enter Total No of Classes ");
a=scanner.nextInt();

System.out.println("Enter No. of Classes Attended");
b=scanner.nextInt();
c=(b/a)*100;
System.out.println("The percentage of class attended"+c);
if(c<75) {
    System.out.println("you are not eligible to attend the exam");
}
}

```

```

else {
    System.out.println("you are eligible to attend the exam");
}
}
}

```

---

```

Enter Total No of Classes
100
Enter No. of Classes Attended
85
The percentage of class attended85.0
you are eligible to attend the exam

```

```

/*
 * 4.A company decided to give bonus of 5% to employee if his/her year of
service is more than 5 years.
Ask user for their salary and year of service and print the net bonus
amount. Note- create a method EmployeeBonus to calculate the bonus and
return it.

 */

import java.util.Scanner;

public class Employee {
    static int year, salary, newsalary;
    static double bonus;

    static double Employeebonus() {
        double res = (int) (salary * .05);
        return res;
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter your year of service");
        year = scanner.nextInt();
        System.out.println("Enter your salary");
        salary = scanner.nextInt();
        if (year > 5) {
            bonus = Employeebonus();
            System.out.println("your bonus amount is " + bonus);
            System.out.println("your salary is" + (salary + bonus));

        } else {
            System.out.println("you are not eligible for bonus
salary is " + salary);
        }
    }
}

```

```
Enter your year of service
8
Enter your salary
15000
your bonus amount is 750.0
your salary is15750.0
```

```
/*
 * 5. Write a program to input the following details:
 i)Employee Name
 ii)Employee Salary
 iii)Employee Year of joining
```

Calculate the Loyalty bonus of the Employee's by

- a)if the year of their joining is on or before than 2017,and their Salary is more than 30000/-, then the bonus will be 22% of the salary.
- b)if the year of their joining is on or before than 2017,and their Salary is less than 30000/-, then the bonus will be 33% of the salary.
- c)if the year of their joining is on or before than 2012, then the bonus will be 40% of the salary.
- d)if the year of their joining is after 2017,and their Salary is less than 30000/-, then the bonus will be 15% of the salary.
- e)if the year of their joining is after 2017,and their Salary is more than 30000/-, then the bonus will be 10% of the salary.

```
*/
```

```
import java.util.Scanner;
```

```
public class EmployeeBonus {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scanner = new Scanner(System.in);
        String name;
        int bonus,newsalary;
        int salary, year;
        System.out.println("Name");
        name = scanner.next();
        System.out.println("Salary");
        salary = scanner.nextInt();
        System.out.println("Year of joining");
        year = scanner.nextInt();
```

```

        if(year<2012) {
            bonus=(int) (.4*salary);
            newsalary =salary+bonus;
            System.out.println("the bonus is"+bonus);
            System.out.println("the added salary is "+newsalary);
        }

        else if(year<=2017 && salary>30000) {
            bonus=(int) (.22*salary);
            newsalary =salary+bonus;
            System.out.println("the bonus is"+bonus);
            System.out.println("the added salary is "+newsalary);
        }
        else if(year<=2017 && salary<30000) {
            bonus=(int) (.33*salary);
            newsalary =salary+bonus;
            System.out.println("the bonus is"+bonus);
            System.out.println("the added salary is "+newsalary);
        }
        else if(year>2017 && salary<30000) {
            bonus=(int) (.15*salary);
            newsalary =salary+bonus;
            System.out.println("the bonus is"+bonus);
            System.out.println("the added salary is "+newsalary);
        }

        else if(year>2017 && salary>30000)
        {
            bonus=(int) (.10*salary);
            newsalary =salary+bonus;
            System.out.println("the bonus is"+bonus);
            System.out.println("the added salary is "+newsalary);
        }
    }

}

Name
Joseph
Salary
15000
Year of joining
2020
the bonus is2250
the added salary is 17250

```

```

/*
 * 6.Write a program to check for the occurrence of a particular character
in a string and display howmany times it has occurred.
note: take the String and the character to be checked as a input from the
user.
 */

```

```
import java.util.Scanner;
```

```
public class Occurrence {
```

```
    public static void main(String[] args) {
```

```

Scanner s=new Scanner(System.in);
System.out.print("enter string : ");
String s1=s.next();
char[] c=s1.toCharArray();

System.out.println("-----");
System.out.print("Enter the character which you want to count
number of occurrence : ");
char n=s.next().charAt(0);

int count=0;

for(int i=0;i<c.length;i++)
{
    if(c[i]==n){
        count++;
    }
}
System.out.println("Number of occurrence of the character
"+n+" is "+count);
}

}

```

```

enter string : malayalam
-----
Enter the character which you want to count number of occurrence : l
Number of occurrence of the character l is 2

```

```

/*
7. Write a program to implement nested try-catch block for NULL Pointer
exception
and NumberFormat Exception
*/

```

```

import java.util.Scanner;

public class Exception1 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scanner=new Scanner(System.in);
    }
}

```

```

System.out.println("Enter character");

String string=null;
try {

    try {
        System.out.println(string.length()); //null pointer exception
    }
    catch (Exception e) {
        // TODO: handle exception
        System.out.println("Null pointer exception");
        System.out.println(e);
    }

    try {
        int k=Integer.parseInt(string); //number format exception
    }
    catch (Exception e) {
        // TODO: handle exception
        System.out.println("Numberformatexception");
        System.out.println(e);
    }
}
catch (Exception e) {
    // TODO: handle exception
    System.out.println("exception");
}

}
Enter character
Null pointer exception
java.lang.NullPointerException: Cannot invoke "String.length()" because "string" is null
Numberformatexception
java.lang.NumberFormatException: Cannot parse null string

```