

PRACTICAL-0

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Section:- A

Roll No.:- 25

Semester:- 4

Shift:- 1st

Batch:- A1

1. Find perimeter of the circle

A.

```
package zero;

import java.util.Scanner;

public class Circle {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the radius of the
circle : ");
        float r=sc.nextFloat();
        float p=(2*22*r)/7;
        System.out.println("Perimeter of the circle with
radius "+r+" is :"+p);
    }
}
<terminated> Circle [Java Application] C:\Users\HP\p2\pool\plugins\org.eclipse.justj
Enter the radius of the circle :
4
Perimeter of the circle with radius 4.0 is :25.142857
```

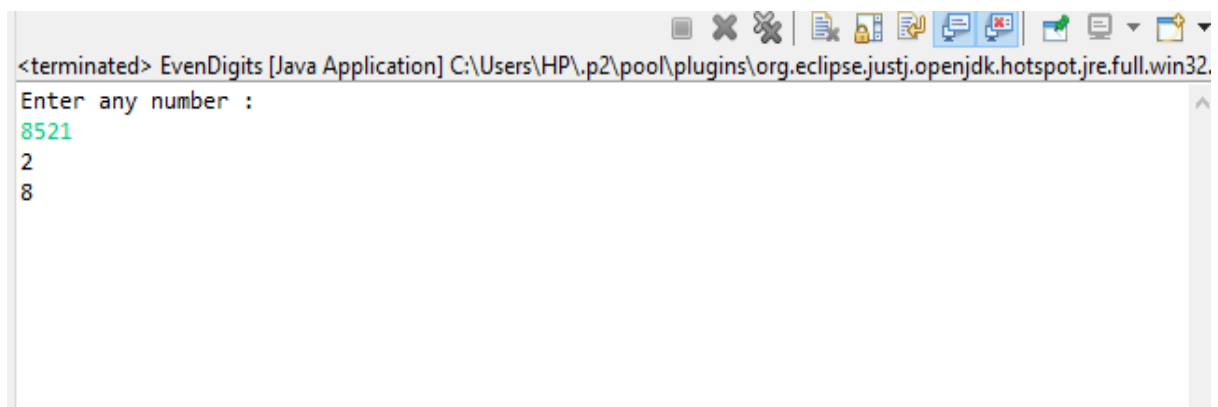
2. Print all digit of a number that are even

A.

```
package zero;

import java.util.Scanner;

public class EvenDigits {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter any number : ");
        int a= sc.nextInt();
        int b,c,i=1,count=0;
        b=a;
        while(a>0)
        {
            a=a/10;
            count++;
        }
        while(b>0) {
            c=b%10;
            if(c%2==0)
            {
                System.out.println(c);
            }
            b=b/10;
        }
    }
}
```



```
<terminated> EvenDigits [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.  
Enter any number :  
8521  
2  
8
```

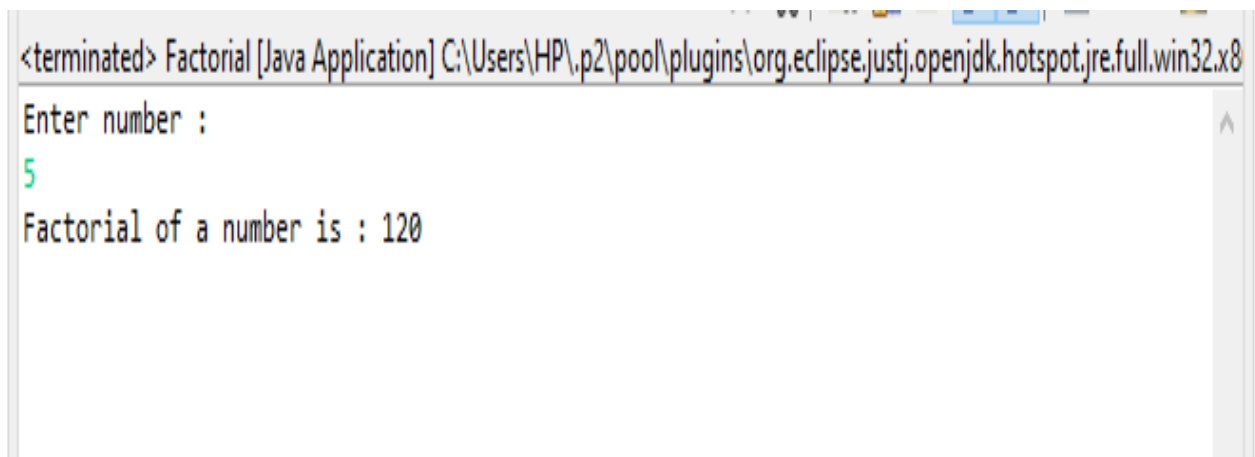
3. Calculate factorial of a number

A.

```
package zero;

import java.util.Scanner;

public class Factorial {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter number : ");
        int n=sc.nextInt();
        int i=1,
            res=1;
        while(i<=n) {
            res=res*i;
            i++;
        }
        System.out.println("Factorial of a number is : 
"+res);
    }
}
```



```
<terminated> Factorial [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86
Enter number :
5
Factorial of a number is : 120
```

4. Print pascals triangle

A.

```
package zero;

import java.util.Scanner;

public class PascalsTriangle {
    public static void main(String[] args) {
        Scanner s = new Scanner (System.in);
        System.out.println("Enter the number of
rows");
        int r = s.nextInt();
        int c = 1;

        for(int i = 0; i < r; i++) {
            for(int sp = 1; sp < r - i; ++sp) {
                System.out.print(" ");
            }

            for(int j = 0; j <= i; j++) {
                if (j == 0 || i == 0)
                    c = 1;
                else
                    c = c * (i - j + 1) / j;

                System.out.printf("%4d", c);
            }

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

<terminated> PascalsTriangle [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.

Enter the number of rows

5

```
      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1
```

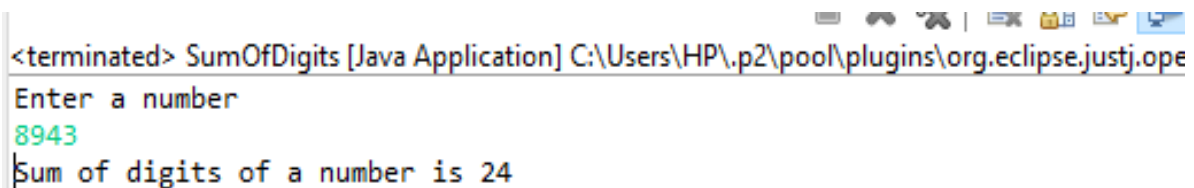
5. Find sum of digits

A.

```
package zero;

import java.util.Scanner;

public class SumOfDigits {
    public static void main(String[] args) {
        long n,sum;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a number ");
        n=sc.nextLong();
        for(sum=0 ;n!=0 ;n/=10)
        {
            sum+=n%10;
        }
        System.out.println("Sum of digits of a
number is "+sum);
    }
}
```



```
<terminated> SumOfDigits [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.open
Enter a number
8943
Sum of digits of a number is 24
```

6.Count the number of vowels in a string
A.

```
package zero;

import java.util.Scanner;

public class NumberOfVowels {
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        System.out.print("Input the string: ");
        String str = in.nextLine();
        int count = 0;
        for (int i = 0; i < str.length(); i++)
        {
            if (str.charAt(i) == 'a' || str.charAt(i)
== 'e' || str.charAt(i) == 'i'
|| str.charAt(i) == 'o' ||
str.charAt(i) == 'u' || str.charAt(i) == 'A' ||
str.charAt(i) == 'E' || str.charAt(i) == 'I'
|| str.charAt(i) == 'O'
|| str.charAt(i) == 'U')
            {
                count++;
            }
        }
        System.out.print("Number of Vowels in the
string: " + count+"\n");
    }
}
```

```
<terminated> NumberOfVowels [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.just
Input the string: Maharashtra
Number of Vowels in the string: 4
```

7. Print reverse of a number

A.

```
package zero;

import java.util.Scanner;

public class Reverse {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter any number :
");
        int num = sc.nextInt();
        int rev = 0;

        while(num != 0) {
            int digit = num % 10;
            rev = rev * 10 + digit;
            num /= 10;
        }

        System.out.println("Reversed Number: " +
rev);
    }
}
```

```
<terminated> Reverse [Java Application] C:\Users\HP\.p2\pool\
```

```
Enter any number :
```

```
5412
```

```
Reversed Number: 2145
```

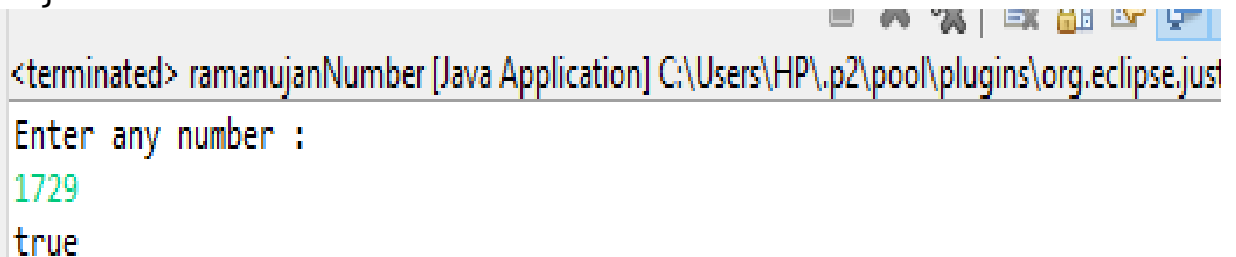
8. Check if a number is Ramanujan's number and return true or false

A.

```
package zero;

import java.util.Scanner;

public class ramanujanNumber {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter any number : ");
        int a=sc.nextInt();
        sc.close();
        System.out.println(ramanujansNumber(a));
    }
    static boolean ramanujansNumber(int n) {
        int i,j;
        for(i=0;i<=Math.pow(n, 1/3.0);i++) {
            for(j=i+1;j<=Math.pow(n, 1/3.0);j++) {
                if(Math.pow(i, 3)+Math.pow(j,
3)==n) {
                    return true;
                }
            }
        }
        return false;
    }
}
```



```
<terminated> ramanujanNumber [Java Application] C:\Users\HP\p2\pool\plugins\org.eclipse.just
Enter any number :
1729
true
```


9. Find volume of a box

A.

```
package zero;

import java.util.Scanner;

public class VolumeOfBox {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter length of a box :
");
        float l=sc.nextFloat();
        System.out.println("Enter breadth of a box :
");
        float b=sc.nextFloat();
        System.out.println("Enter height of a box :
");
        float h=sc.nextFloat();
        float v=l*b*h;
        System.out.println("Volume of a box : "+v);
    }
}
```

```
<terminated> VolumeOfBox [Java Application] C:\Users\HP\.p2\pc
Enter length of a box :
5.5
Enter breadth of a box :
3.3
Enter height of a box :
2.5
Volume of a box : 45.375
```

10. Encode a string by incrementing each alphabet by 3 (eg: abc -> def)

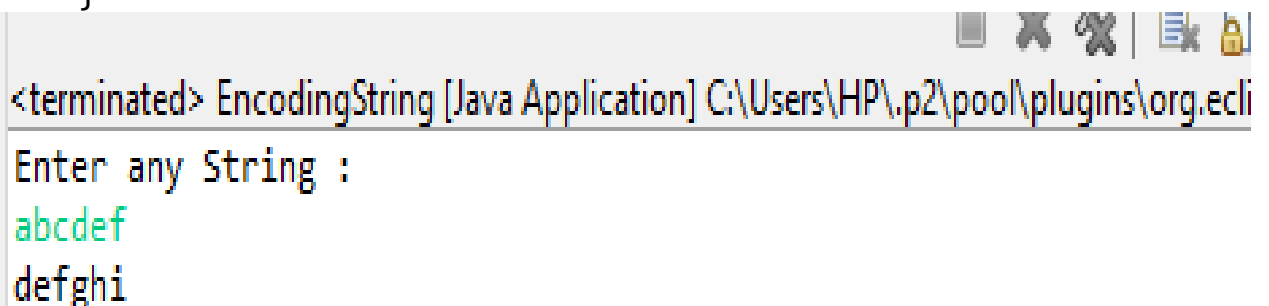
A.

```
package zero;

import java.util.Scanner;

public class EncodingString {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter any String : ");
        String s=sc.next();
        String nS = "";
        for (int i = 0; i < s.length(); ++i) {
            int val = s.charAt(i);
            int k=3;
            if (val + k > 122) {
                k -= (122 - val);
                k = k % 26;
                nS += (char)(96 + k);
            } else {
                nS += (char)(val + k);
            }

            k = 3;
        }
        System.out.println(nS);
    }
}
```



```
<terminated> EncodingString [Java Application] C:\Users\HP\.p2\pool\plugins\org.ecli
Enter any String :
abcdef
defghi
```