

School of Computer Science and Engineering
VIT-AP University
Artificial Intelligence: CSE 3002 Laboratory

1. Given square matrix of dimension $n \times n$ where $n > 1$, write a program to find the sum of values of even and odd values of each row of the matrix.

Input:

```
import java.util.*;
public class MatrixQ {
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the size of your matrix");
        int s=sc.nextInt();
        int m[][]=new int[s][s];
        int nm[][]=new int[s][2];
        for(int i=0;i<s;i++)
        {
            int evsum=0;
            int oddsum=0;
            for(int j=0;j<s;j++)
            {
                System.out.println("Enter the "+(j+1)+" element of the "+(i+1)+" row");
                m[i][j]=sc.nextInt();
                if(m[i][j]%2!=0)
                    evsum+=m[i][j];
                else
                    oddsum+=m[i][j];
            }
            int count=0;
            nm[i][count]=evsum;
            count++;
            nm[i][count]=oddsum;
        }
    }
}
```

```
System.out.println("The entered matrix is:"+Arrays.deepToString(m));
System.out.println("The new matrix is:");
System.out.println("Odd Even" );
for(int i=0;i<s;i++) {
    for (int j = 0; j < 2; j++) {
        System.out.print(nm[i][j]);
        System.out.print("  ");
    }
    System.out.println("");
}
}
```

Output:

```
The entered matrix is:[[0, 1, 2, 3], [2, 3, 4, 5], [6, 4, 1, 2], [0, 9, 1, 2]]
The new matrix is:
Odd Even
4      2
8      6
1      12
10     2

Process finished with exit code 0
```

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