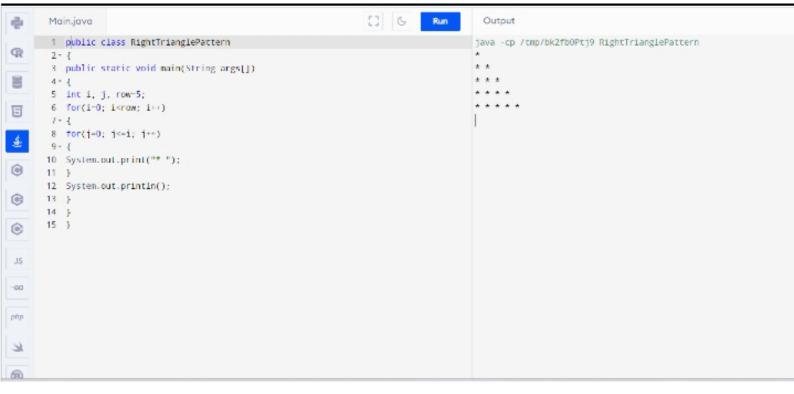
```
course: - Java programming
Class Test-2
                                            Counsecode: -CSA0954
         Dwrite a program for Matrix multiplication
          Priogram:
          Import java util Scanner;
          Class HULHBITHIX
          Public Static wind main (string angs []
          int x1, x2, c1, c2, i, j, k, Sum;
          Scarmen in= new
          Scannen(System-in);
           System-out-println ("Enter the number of nows of matrix1");
           M1=in-nextint();
           System-out-paintln ("Entex the number of columns of matrix 1)
           (I = in next Int();
           System-out-println("Enter the number of nows of matrix 2);
           912=in-next Int();
           System-out-println ("Enter the number of columns of matrix 8)
           (2= in-next/at/);
           if/(1== x2)
            int mat][][]=new int[n1][[[]];
            int mat2[][]=newint[912][(2];
            int nes[][] onew int[n1][c2];
            System out println("Entex the elements of matrix 1");
            for(1=0; 12×1; 1++)
```

Name: - Gr.v Hamsika Regno: -192111269

```
fon(j=0; j<c1; j++)
                                                                                                import java util scanner
                                                                                               Public class Sum of Digits
     mats[i][i]=in-rextInt();
                                                             Else
                                                                                               Public Static void main (string args)
                                                             System.out-print/multiplication does
    System. out. Println ("Enter the elements of matrix 2")
                                                                         not exist");
                                                                                                int number, digit, sum = 0;
    fon(i=0; i< n2; i++)
                                                                                                Scannen Sc=new
                                                                                                Scanner (Systemin);
   fon(j=0; j<c2; j++)
                                                            Output:-
                                                                                                System out paint ("Enter the number:"):
   mata[i][j]=in-nextInt();
                                                             Enter the number of nows of matrix
                                                                                                number = Sc next Int ();
                                                                                                while (number >0)
                                                            Enter the number of columns of mutrial
   System-out-paintln("In In output matrix:");
                                                            Enter the number of nows of matrix 2 digit = number 1/2 10;
   for(i=0; ixx1; i++)
                                                                                                 Sum = Sum + digit;
  fon(j=0; j<c2; j++)
                                                            Enter the number of columns of matrix number = number/10;
  Sum=0;
                                                                                                 System out Println/"Sum of Digits;
                                                            Enter the elements of matrix I
  for/k=0; k<912; k++)
 Sum += mat1 [i][k] * mat2 [k][j];
                                                            Enter the elements of materix 2
                                                                                                 Output: -
                                                                                                  Enter the number: #143
 91es[i])j]=Sum;
                                                             41
                                                                                                  Sum of Digits: 8
                                                            Output matrix :-
for(i=0; i < n1; i++)
                                                             10 5
                                                             22 18
                                                            (3) Java program for the Sum of n
for/j=0; j((2; j++))
                                                              digit number sum should be
System out print (nes[i][j]+"");
                                                               Single digit
System-out-paintln();
                                                            Program)-
```



```
[] 6
                                                                               Run
                                                                                        Output
      46 System.out.println("\n\noutput matrix:-");

    java -cp /tmp/U87KwBYfEx MUlMatrix

Q2
      4/ for ( i=0 ; i < r1 ; i ++ )
                                                                                        Enter the number of rows of matrix1
      48
      49 for ( j=0 ; j < c2; j++)
                                                                                        Enter the number columns of matrix 1
      50 * {
      51 sum=0;
                                                                                        Enter the number of rows of matrix2
回
      52 for ( k= 0 ; k <r2;k++ )
      53 - {
                                                                                        Enter the number of columns of matrix 2
      Enter the elements of matrix1
Θ
      56 }
      57 res[i][j]-sum;
                                                                                        5 3
(6)
      58 )
                                                                                        Enter the elements of matrix2
      59 for ( \mathbf{i}= 0 ; \mathbf{i} < r1; \mathbf{i}++ )
                                                                                        2.3
      50 - {
(8)
      61 for ( j=0 ; j < c2;j++ )
                                                                                        output matrix:-
      62 System.out.print(res[i][j]+" ");
                                                                                      10 5 22 18
JS
      63
      64 System.out.println();
      65 }
      66 }
      67 else
      68 System.out.print("multipication does not exist ");
      70
    71 )
```

