

Assignment - 51] Sum of digit:

```
Scanner input = new Scanner(System.in);
int n = input.nextInt();
int sum = 0;
while (n != 0) {
    int rem = n % 10;
    sum = sum + rem;
    n = n / 10;
}
System.out.println(sum);
```

2] Square root:

```
Scanner input = new Scanner(System.in);
double n = input.nextDouble();
double Sqrt = Math.sqrt(n, 0.5);
double Sq = Math.sqrt(n);
System.out.println(Sqrt + " , " + " - " + Sqrt);
```

### 3] Pyramid pattern :-

```
Scanner input = new Scanner (System.in);
int n = input.nextInt();
for (int i = n; i >= 1; i--) {
    for (int j = 0; j < n - i; j++) {
        System.out.print(" ");
    }
    for (int k = 1; k <= i; k++) {
        System.out.print("*");
    }
    System.out.println();
}
```

### 4] Matrix Multiplication :-

```
Scanner input = new Scanner (System.in);
int r = input.nextInt();
int c = input.nextInt();
int mat1 [r][c] = new int [r][c];
int mat2 [r][c] = new int [r][c];
for (int i = 0; i < r; i++) {
    for (int j = 0; j < c; j++) {
        mat1 [i][j] = input.nextInt();
    }
}
```

```
for (int i=0; i<n; i++) {  
    for (int j=0; j<c; j++) {  
        mat2[i][j] = input.nextInt();  
    }  
}  
  
int sum[ ][ ] = new int[n][c];  
for (int i=0; i<n; i++) {  
    for (int j=0; j<c; j++) {  
        sum[i][j] = 0;  
    }  
}  
for (int k=0; k<c; k++) {  
    sum[i][j] = sum[i][j] +  
        (mat1[i][k] * mat2[k][j]);  
}  
System.out.println(sum[i][j] + " ");  
}  
System.out.println();  
}
```