```
NAME: Vinith Shetty
```

BRANCH/ROLL NO: AI&DS/55

1.)STRING COMPARE

```
public class Stringcomp {
  public static void main(String[] args) {
    String a = "Apple";
    String b = "Apple";
    String c = "Strawberry";
    String d = new String("Apple");
    System.out.println(a.equals(b));
    System.out.println(a.equals(c));
    System.out.println(a.equals(d));
}
```

OUTPUT:

```
C:\Users\Acer\Desktop\experiments java>java Stringcomp.java
true
false
true
```

2.)STRING CONCATENATION

```
public class Stringconc {
  public static void main(String[] args) {
    String a1 = "Vinith";
    String a2 = "Shetty";
    String a3 = a1.concat(a2);
    System.out.println(a3);
}
```

```
}
```

OUTPUT:

C:\Users\Acer\Desktop\experiments java>java Stringconc.java
VinithShetty

3.)STRING SIZE

```
public class Stringsize {
  public static void main(String[] args) {
    String a = "He is playing cricket";
    System.out.println("The size of the string is:" + a.length());
  }
}
```

OUTPUT:

C:\Users\Acer\Desktop\experiments java>java Stringsize.java
The size of the string is:21

4.) MATRIX

```
import java.util.*;

public class Matrix {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);

  int a[][] = { { 3, 6 }, { 6, 2 } };

  int b[][] = { { 5, 9 }, { 9, 3 } };
```

```
int c[][] = new int[2][2];
int i, j, k;
System.out.println("\nGiven A Matrix is...");
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     System.out.print(a[i][j] + "\t");
  }
  System.out.println("\n");
}
System.out.println("\nGiven B Matrix is...");
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     System.out.print(b[i][j] + "\t");
  }
  System.out.println("\n");
}
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     c[i][j] = a[i][j] + b[i][j];
  }
}
System.out.println("\nMatrix Addition is...");
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     System.out.print(c[i][j] + "\t");
  }
```

```
System.out.println("\n");
}
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     c[i][j] = a[i][j] - b[i][j];
  }
}
System.out.println("\nMatrix Subtraction is...");
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     System.out.print(c[i][j] + "\t");
  }
  System.out.println("\n");
}
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     for (k = 0; k < 2; k++) {
       c[i][j] = c[i][j] + a[i][k] * b[k][j];
    }
  }
}
System.out.println("\nMatrix Multiplication is...");
for (i = 0; i < 2; i++) {
  for (j = 0; j < 2; j++) {
     System.out.print(c[i][j] + "\t");
  }
  System.out.println("\n");
```

```
}
}
}
OUTPUT:
C:\Users\Acer\Desktop\experiments java>java Matrix.java
Given A Matrix is...
Given B Matrix is...
Matrix Addition is...
8 15
15
Matrix Subtraction is...
-2
-3
Matrix Multiplication is...
        42
45
        59
```