

NAME- RUTVIK MARAKANA

ASSIGNMENT-2

- **Problem 1:-**

```
CLASS Cylinder  
BEGIN
```

```
    METHOD Volume  
    BEGIN
```

```
        PI ← 3.14
```

```
        READ input_value for the radius and length of the cylinder
```

```
        Radius ← input_value of radius
```

```
        Length ← input_value of length
```

```
        Area ← Radius*Radius*PI
```

```
        Volume ← Area*Length
```

```
        PRINT Area of the cylinder is Area
```

```
        PRINT Volume of the cylinder is Volume
```

```
    END Volume  
END Cylinder
```

- **Problem 2:-**

```
CLASS SumDigits  
BEGIN
```

```
    METHOD SUM  
    BEGIN
```

READ input_value for an integer between 0 and 1000

Number \leftarrow input_value of the integer

Sum \leftarrow sum of individual digits of the Number

PRINT The entered number is Number

PRINT The sum of digits of the number is Sum

END SUM

END SumDigits

- **Problem 3:-**

CLASS Distance

BEGIN

METHOD Calculate_Distance

BEGIN

READ input_value for 2 points (X1, Y1) and (X2, Y2)

P1 \leftarrow X2 – X1

P2 \leftarrow Y2 – Y1

distance \leftarrow Square_root [(P1)² + (P2)²]

PRINT The distance between 2 points is distance

END Calculate_Distance

END Distance

- **Problem 4:-**

CLASS DrivingCost

BEGIN

```
METHOD Cost  
BEGIN
```

```
    READ input_value for the distance to be travelled, car fuel efficiency  
    and the fuel cost per gallon
```

```
    Distance  $\leftarrow$  input_value for the distance to be travelled  
    Mile_PerGallon  $\leftarrow$  input_value for the car fuel efficiency  
    Fuel_Cost  $\leftarrow$  input_value for the fuel cost per gallon  
    Trip_Cost  $\leftarrow$  (Distance/Mile_PerGallon)*Fuel_Cost
```

```
    PRINT The distance travelled is Distance  
    PRINT The car fuel efficiency is Mile_PerGallon  
    PRINT The fuel cost per gallon is Fuel_Cost  
    PRINT The total cost of trip is Trip_Cost
```

```
END Cost  
END DrivingCost
```