Aim:

Develop an application of your own choice for the illustration of concepts like Classes, Object, Constructors, Methods and parameter passing, Constructor overloading, Method overloading, Keyword 'new', Keyword 'this'.

PSUEDOCODE:

Public class EX1

begin

  data int n1, n2;

  data String s1, s2, s3;

  Public EX1 (n1, n2) constructor

  Public EX1 (s1, s2, s3) constructor

  begin

    public static main class (String argument)

  begin

    EX1 myobj object = new EX1 function (70, 80)

    Call display using the object

    EX1 obj object = new EX1 function ("first", "second", "third")

    Call display using the object

```
Sum aobj object = new Sum ()
add = aobj object add function (10, 20) call
display "Method:" + add

add1 = aobj object add function (10.7, 12.5) call

display "Method Overloading:" + add1

end

 end
```

Sum class

begin

Public add function (n1, n2)

n3 = n1 + n2

return n3

end

begin

public add function (n1, n2)

n3 = n1+ n2

return n3

end

Program:

```java
public class EX1 {
    int x,y;
    String a,b,c;

    public EX1(int x, int y) {
     this.x = x;
     this.y = y;
    }
    public EX1(String a, String b, String c) {
     this.a=a;
     this.b=b;
     this.c=c;
    }

    public static void main(String[] args) {
    EX1 myobj = new EX1(70, 80);
```

```java
        System.out.println("Constructor : "+"Value of x = " +
myobj.x + "\tValue of y = "+ myobj.y);
        EX1 obj = new EX1("first", "second", "third");
        System.out.println("Constructor Overloading : " + "A
comes " + obj.a + "\tB comes " + obj.b + "\tC comes " +
obj.c);
        Sum aobj = new Sum();
        int add = aobj.add(10, 20);
        System.out.println("Method : " + add);
        double add1 = aobj.add(10.7, 12.5);
        System.out.println("Method Overloading : " + add1);
    }

}

class Sum{
    public int add(int a, int b) {
        int c = a+b;
        return c;
    }
    public double add(double a, double b) {
        double c = a+b;
        return c;
    }
}
```

OUTPUT:

```
Constructor : Value of x = 70    Value of y = 80
Constructor Overloading : A comes first B comes second  C comes third
Method : 30
Method Overloading : 23.2
```

Result:

        The program successfully implemented classes, objects, methods and parameter passing, constructor and method overloading and used 'this' and 'new' keyword.