```
//class & object in java
class Rectangle
{
int length,width;
void getDetails(int x,int y){
length = x;
width = y;
}
int area(){
int a = length * width;
return a;
}
}
class class_object{
public static void main(String [] args){
Rectangle o1 = new Rectangle();
o1.length = 10;
o1.width = 20;
System.out.println("Area of Rectangle :"+o1.area());
Rectangle o2 = new Rectangle();
o2.getDetails(20,30);
System.out.println("Area of Rectangle :"+o2.area());
} }
```

output:

```
Area of Rectangle :200
```

Area of Rectangle :600

//Data Hiding Getter and Setter in java

```
class ShapeRectangle
{
private int length,width;
int area(){
int a = length * width;
return a;
}
}
class class_object {
public static void main(String[] args) {
ShapeRectangle o1 = new ShapeRectangle();
o1.length = 10;
o1.width = 20;
System.out.println("Area of Rectangle :" + o1.area());
}
}
```

output:

Error

//Data Hiding Getter and Setter in java(in private)

```
class ShapeRectangle
```

```
{
private int length,width;
//Getter Method
int getLength() {
return length;
}
int getWidth() {
return width;
}


//Setter Method
void setLength(int l){
if(l > 0)
length = l;
else
length = 0;
}
void setWidth(int w){
if(w > 0)
width = w;
else
width = 0;
}
int area(){
```

```
int a = length * width;

return a;

}

}

class get_set{

public static void main(String [] args){

ShapeRectangle o1 = new ShapeRectangle();

o1.setLength(-10);

o1.setWidth(20);

System.out.println("Length :"+ o1.getLength());

System.out.println("Width :"+ o1.getWidth());

System.out.println("Area of Rectangle :"+ o1.area());

}

}
```

output:

Length :0

Width :20

Area of Rectangle :0

```
// Constructor Overloading
class Box
{
float length , breadth;
public Box(){ //Default
length = 2;
breadth = 5;
}
public Box(float x,float y) // Parameterized
{
length = x;
breadth = y;
}
Box(float x)
{
length = breadth = x;
}
float area(){
return length+breadth;
}
}
class Constructor_Overloading {
public static void main(String[] args) {
Box o = new Box();
```

```
System.out.println("Area : "+ o.area());

Box o1 = new Box(3,6);

System.out.println("Area : "+ o1.area());

Box o2 = new Box(3);

System.out.println("Area : "+ o2.area());

}

}
```

output:

```
Area : 7.0

Area : 9.0

Area : 6.0
```