Q1. Explain Inheritance in java Programming?
Ans: Passing Properties from one class to another class is

Properties may be member data or member function

A class who gives the properties known as Parent / Super / Base class

A class who receives the properties are known as Sub / derived / Child class

In case of Inheritance Member Data or member function of Parent class should not be private

extends keyword to use inherit the class

Java does not support multiple inheritance using class

```
Syntax:
class Parent{
//member data
//member function
}
```

known as inheritance

```
class Child extends Parent{
//Member data
//Member Function
```

Point

Base class/Super class/Parent class

int x;
int y;

1. default constructor
2. Parameterized Constructor
main()

Circle

Child class/Derived class/Sub class

float r;
1. default constructor
2. Parameterized constructor
3. showData

Q2. Explain this keyword in java Programming? Ans:

This keyword represent current class objects.

When an instance variable name is same as local variable (formal parameter). this can be used to refer to the instance variable of a class explicitly

```
Example:
class Point{
public int x;
public int y;//instance variable
public Point(){
System.out.println("Point class Default Constructor is
called");
public Point(int x,int y){
this.x=x;
this.y=y;
System.out.printf("x=%d Y=%d ",x,y);
System.out.println("Point class Parameterized Constructor
is called");
}
void showData(){
System.out.println("X_CO: "+x);
System.out.println("Y CO: "+y);
public static void main(String args[]){
System.out.println("Point class Main Method");
Point p2=new Point(10,20);
p2.showData();
```

```
}
class Circle extends Point{
}
1. This keyword can be used to call current class method
Syntax:
this.methodName()
2. This keyword can be used to call current class
Constructor
Syntax:
this()
this(10,20)
class Point{
public int x;
public int y;//instance variable
public Point(){
System.out.println("Point class Default Constructor is
called");
```

```
}
public Point(int x,int y){
this();//to call current class default constructor
this.x=x:
this.y=y;
System.out.printf("\nx=%d Y=%d ",x,y);
System.out.println("Point class Parameterized Constructor
is called");
}
void showData(){
System.out.println("X_CO: "+x);
System.out.println("Y CO: "+y);
}
void hi(){
System.out.println("Hi... Method is Called");
this.showData();
int x=111;
int y = 222;
System.out.printf("\nx=%d Y=%d ",this.x,this.y);
}
public static void main(String args[]){
System.out.println("Point class Main Method");
```

```
Point p2=new Point(10,20);
p2.hi();
}
class Circle extends Point{
```