Quiz 03

Name: Mosnoon Mofiz Arman

ID: 1921079642

Course: CSE215

Section: 03

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(a).

```java
class Point {
    private int x;
    private int y;
    public Point (){

    }

    public Point (int x, int y){
        this.x = x;
        this.y = y;
    }

    public int getX (){
        return this.x;
    }
}
```

```java
    public int getY(){

    return this.y;

}


    public Point getPoint(){
    Point P1 = new Point();
    int x1 = this.x;
    int y1 = this.y;
    int x2 = P1.getX();
    int y2 = P1.getY();

}


    public double getDistance(Point P){

    return Math.sqrt((Math.pow(x-p.getX(),2)) +
            (Math.pow(y-p.getY(),2)));

}
    public String toString(){
    return "The center of the circle is (" + this.x +
```

```java
                        ", " + this.y + ") with radius" + getDistance();
    }
}
class Circle{
        private Point center;
        private double radius;
    public Circle (){

    }
    public Circle (int cx, int cy, double radius)
    {

        this. x = cx;
        this. y = cy;


    public Point getCenter {

    }
    public boolean insideCircle (Point p){

    }
```

```java
    public String toString {
}       return "the center of the circle is " +
        this.x", " this.y + ") with radius + "the
public static void main                    radius";
}
    public class Main {

        public static void main (String[] args)

        Circle c1 = new Circle ();

        }
    }
}
```

(b)

```java
    public class Main {
        public static void main (String[] args){

        Circle c1 = new Circle (2, 4, 5);

        }
```

(c)

```
public static void main(String[] args){
Circle c1 = new Circle (4,5);
}
```

(d)

```
public static void main(String[] args){
Circle c1 = new Circle();
System.out.println(c1.toString);
}
```
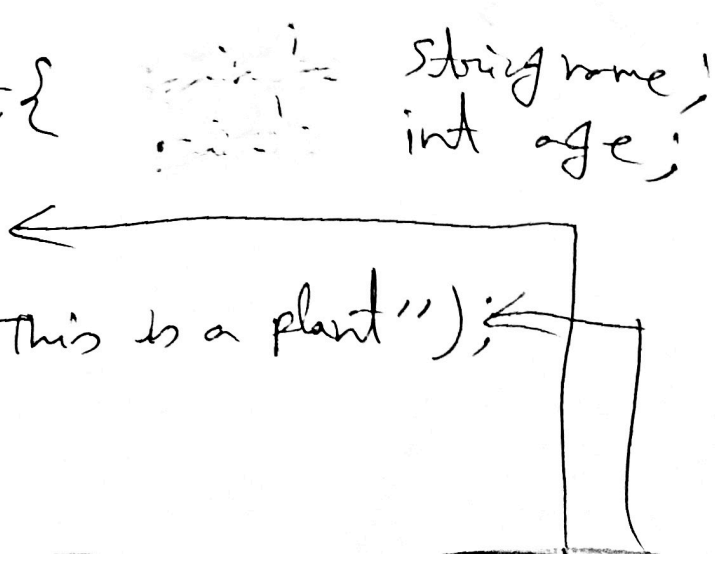
Ans to the QNO: 02

Constructor chaining is the process of calling one constructor from another constructor with respect to current object. Within same class, it can be done using this() keyword for constructors in the same class. From Parent class : by using super() keyword to call constructor from the parent class.

Example :

```
public class Plant {              String name;
                                  int age;
    public Plant() {
        this ("This is a plant");
    }
}
```

```java
public Plant (String p) {
    this (p, 8);
}
public Plant (String p, int age) {
    this. name = p;
    this. age = age;
}
public static void main (String[] args) {
    Plant pk = new Plant ();

}

}
```