Consider the Point and Circle class interactions provided on Reference Sheet II.

1. Write method called move(..) in the Point class that will move the point by dx in the x direction and dy in the y direction.

```java
public void move(int dx, int dy) {
    x += dx;
    y += dy;
}
```

2. Write method called move(..) in Circle class that moves the Circle’s center.

```java
//Circle’s center is Point object
public void move(int dx, int dy){
    center.move(dx , dy);
}
```

3. Write another constructor in the Circle class that takes in three parameters as shown.

```java
public Circle(int cx, int cy, int radius) {
    center = new Point(cx, cy);
    this.r = radius;
}
```

4. Write method liesWithin(..) in the Circle class that will return true if the input Point lies within or on the circle, otherwise returns false. Hint: Distance between Circle’s center and input Point can be determined by Pythagorean theorem.

```java
public boolean liesWithin(Point p1){
    int val = (p1.getX() - center.getX())*(p1.getX() - center.getX())
    + (p1.getY() - center.getY())*(p1.getY() - center.getY());
    return (val <= r*r);
}
```