

Contrasts for CS1316

Predict

A

```
//If
```

```
int x = 0;
```

```
if (x < 5)
```

```
{x=x+1;}
```

```
System.out.println(x);
```

B

```
//While
```

```
int y = 0;
```

```
while (y < 5)
```

```
{y=y+1;}
```

```
System.out.println(y);
```

Common

```
Picture dog = new Picture(FileChooser.getMediaPath("dog-blue.jpg"));
Picture house = new Picture(FileChooser.getMediaPath("house-blue.jpg"));
Picture tree = new Picture(FileChooser.getMediaPath("tree-blue.jpg"));
PositionedSceneElement node1 = new PositionedSceneElement(dog.scale(0.5));
PositionedSceneElement node2 = new PositionedSceneElement(tree.scale(0.5));
PositionedSceneElement node3 = new PositionedSceneElement(house.scale(0.5));
node1.setNext(node2); node2.setNext(node3);
```

```
PositionedSceneElement node1a = new PositionedSceneElement(dog.scale(0.5));
PositionedSceneElement node2a = new PositionedSceneElement(tree.scale(0.5));
PositionedSceneElement node3a = new PositionedSceneElement(house.scale(0.5));
node1a.setNext(node2a); node2a.setNext(node3a);
```

A. What happens?

```
PositionedSceneElement current = node1;
PositionedSceneElement theRest = node1.getNext();
current.setNext(node1a);
while (node1a.getNext() != null) {
    current = node1a.getNext();
}
current.setNext(theRest);
Picture bg = new Picture(400,400);
node1.drawFromMeOn(bg);
bg.show();
```

B. What happens?

```
node1.setNext(node1a);  
Picture bg = new Picture(400,400);  
node1.drawFromMeOn(bg);  
bg.show();
```

C. What happens?

```
PositionedSceneElement holder = node1;  
PositionedSceneElement rest = node1.getNext();  
while (node1a != null) {  
    holder.setNext(node1a);  
    node1a=node1a.getNext();  
    holder = holder.getNext();  
}  
holder.setNext(rest);  
Picture bg = new Picture(400,400);  
node1.drawFromMeOn(bg);  
bg.show();
```

Predict

A

```
//For
int n = 0;
for (int q=0 ; q < 10; q++){
    System.out.println(n);
    if (q == 5) {n=-4;}
    n=n+1;}
```

B.

```
//While
int n2 = 0;
int q = 0;
while ( q < 10){
    System.out.println(n2);
    if (q == 5) {n2=-4;}
    n2=n2+1;
    q = q + 1;}
```