

### Java Questions and Answers

**1. What would be the output of executing the following Java code fragment?**

```
int a[] = {2,4,6};  
for (int i=0; i<a.length; i++)  
{  
    int b=a[i];  
}  
System.out.println(b);
```

*Answer: scoping error, the variable b cannot be accessible outside the for-loop scope*

**2. What would be the output of executing the following Java code fragment?**

```
int i=0;  
String []x={"eat","sleep","repeat"};  
while (i<x.length)  
{  
    System.out.println(x[i]);  
    i++;  
}
```

*Answer:  
eat  
sleep  
repeat*

**3. What would be the output of executing the following Java code fragment?**

```
public static int rate(int p, int q)  
{  
    int z=p+q;  
    return z;  
}  
public static int flow(int p)  
{  
    int deli=p*2;  
    System.out.println(deli);  
    int prime=rate(p, deli);  
    return prime;  
}  
public static void main(String  
[]args)  
{  
    System.out.println(flow(2));  
}
```

*Answer:  
4  
6*

**4. What will be the result of executing the following code?**

```
public class Student {
    int x;
    int y;
    public Student(int x1, int y1) {
        x = x1;
        y = y1;
    }
    public void busa() {
        x = x - 1;
    }
    public void kopa() {
        x = x + 2;
    }
    public static void main(String []args){
        Student p= new Student(23, 12);
        Student c= new Student(10, 20);
        p.kopa();
        System.out.println(p.x + " " + p.y);
        p=c;
        p.busa();
        System.out.println(c.x + " " + c.y);
    }
}
```

**Answer:**

**p.x 25      p.y 12**  
**c.x 9        c.y 20**

**5. Write down what would be printed when code in (a) up to (g) is executed.**

**You may assume the code immediately below, to declare variables, has been executed.**

```
String[] x = {"ab", "cd", "ef"};
String[] y = x;
String[] z = {"ab", "cd", "ef"};
```

- a. System.out.println(x==y);
- b. System.out.println(x==z);
- c. System.out.println ("w"+"w");
- d. System.out.println ("w"+1);
- e. System.out.println (3/2);
- f. System.out.println(3-(1+2));
- g. System.out.println("w"\*3);

**Answer:**

- a. True**
- b. False**
- c. ww**
- d. w1**
- e. 1**
- f. 0**
- g. error**

**6. What will be the output of the following program fragment?**

```
int a;
a=1;
a=10.5;
System.out.println (a);
```

**Answer:**

**Incompatible type error**

## Python Questions and Answers

7. Assume the code below, to declare variables, has been executed.

What would be the value after executing each of the following expressions of Python code?

```
len=[2,4,1]
bat=len
can=[2,4,1]

a. print(len==bat)
b. print(len==can)
c. print ((1+2)*3)
d. print ("k"+"s")
e. print ("k"+1)
f. print (5/2)
g. print ("y"*3)
```

**Answer:**

- a. True
- b. True
- c. 9
- d. ks
- e. k1
- f. 2.5
- g. yyy

8. What would be the output of the following program after it is executed?

```
total = 0;
i = 0;
while i < 3:
    total=total+i
    i += 1
print(total)
```

**Answer:**

3

9. What would be the output of the following program after it is executed?

```
def map(g,s):
    a=g+s
    return a
def can(p):
    x=p*2
    print(x)
    var=map(p,x)
    return var
print(can(3))
```

**Answer:**

6  
9

10. What would be the output of the following program after it is executed?

```
list = [1, 3]
for i in list:
    a="bye"
    print(i)
print(a)
```

**Answer:**

1  
3  
bye

11. What would be the output of the following program after it is executed?

```
a=10.5
a="bye"
print(a)
```

**Answer:**

bye  
x1 = {'name': 'Jack', 'age': 28}

**12. What would be the output of the following program after it is executed**

```
x1 = {'name': 'Jack', 'age': 28}
x2 = {'name': 'Matt', 'age': 40}
print(x1['age'])
print(x2['age'])
x1=x2
x2['age']=x2['age']+1
print(x1['age'])
print(x2['age'])
```

**Answer:**

**28**

**40**

**41**

**41**