

Java Genesis Chapter 5

Quick Quiz

Question 1

What is printed in the Output window by each of the following Java fragments?

- (a)

```
int [] a = {1, 3, -2};
int prod = 1;
for (int i=0; i<3; i++) prod = prod*a[i];
System.out.print(prod);
```
- (b)

```
int [] b = {7, 3, 2, -4, 8};
int i = 0;
while (i+1 < b.length && b[i] > b[i+1]) i++;
System.out.print(i+" "+b[i]);
```
- (c)

```
int [] c = new int [4];
c[0] = 1;
for (int j=1; j<4; j++) c[j] = c[j-1] + j;
for (int j=0; j<4; j++) System.out.print(c[j]);
```

Question 2

What is printed in the Output window by each of the following Java fragments?

- (a)

```
int [] a = {1, 3, 2};
int [] b = {1, 3, 2};
for (int i=0; i<3; i++) {
    b[i] = 2*a[i];
    System.out.print(a[i]+""+b[i]);
}
```
- (b)

```
int [] a = {1, 3, 2};
int [] b = a;
for (int i=0; i<3; i++) {
    b[i] = 2*a[i];
    System.out.print(a[i]+""+b[i]);
}
```

Question 3

What is printed in the Output window by each of the following Java fragments?

- (a)
- ```
int [] a = {1, 7, 3, 4, 8, -2};
int max;
for (int i=0; i<a.length; i++) {
 max = a[0];
 for (int j=0; j<=i; j++)
 if (a[j] > max) max = a[j];
 a[i] = max;
}
for (int i=0; i<a.length; i++)
 System.out.print(a[i]+" ");
```
- (b)
- ```
int [] b = {-1, -1, -1, -1, -1};
int k;
for (int i=0; i<5; i++) {
    do k = (int)(5*Math.random());
    while (b[k] != -1);
    b[k] = i;
}
int sum = 0;
for (int i=0; i<5; i++)
    sum = sum + b[i];
System.out.print(sum);
```

Question 4

What is printed in the Output window by each of the following Java fragments?

- (a)
- ```
int [] a = {1, 3, 2};
int [] b = {4, 2, 4};
int [] temp = a;
a = b;
b = temp;
System.out.print(a[0]+" "+a[1]+" "+a[2]+"\\n"
 +b[0]+" "+b[1]+" "+b[2]);
```
- (b)
- ```
int [] a = {1, 3, 2};
int [] b = {4, 2, 4};
int [] temp = a;
for (int i=0; i<3; i++) a[i] = b[i];
b = temp;
System.out.print(a[0]+" "+a[1]+" "+a[2]+"\\n"
    +b[0]+" "+b[1]+" "+b[2]);
```