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| **Skill 21.1: Exercise 1** |
| Consider the following code,  int a = 3;  int b = a;  b = 100;  int[] c = {1, 2, 3, 4};  int[] d = c;  d[1] = 99;  d = new int[5];  int[] e = {5, 6, 7, 8};  int[] f = {5, 6, 7, 8};  f[1] = 98;  e = f;  String g = "hello";  String h = g;  h = "goodbye"; |
| 1. What values are stored in d after the above code is executed? |
| 1. What values are stored in c after the above code is executed? |
| 1. What is the value of b after the above code is executed? |

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| **Skill 21.2: Exercise 1** | | | |
| Refer to the code below to answer the following,  public class Tester  {  public static void main(String args[ ])  {  int s[ ] = {1, 2, 3, 4, 5, 6};    for(int g = 0; g < s.length; g++)  System.out.print(s[s] + “ “);  System.out.print(“\n”);  testMethod(s);  for(int g = 0; g < s.length; g++)  System.out.print(s[g] + “ “);  }  public static void testMethod(int pp[ ])  {  int len = pp.length;  int t2[ ] = new int[len];    for(int j = 0; j < len; j++)  t2[j] = pp[len – j – 1];    for(int k = 0; k < t2.length; k++)  System.out.print(t2[k] + “ “);    System.out.print(“\n”);  pp = t2;  }  } | | | |
| Complete the stack and heap diagram, then indicate the output that would be printed | | | |
| **Stack** | **Heap** | | **Output** |
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| **Skill 21.2 Exercise 2** | | | |
| public class Tester {      public static void main(String args[]) {          int[] prf = { 13, 22, 89, 15 };          double d = 30.89;          Circle myCir = new Circle(18);//sets rad to 18          myCir.rad = 14;          fg(prf, d, myCir);          System.out.println(d);          System.out.println(prf[2]);          System.out.println(myCir.rad);      }      public static void fg(int[] x, double d, Circle c) {          d++;          x[2] = 16;          c.rad = 122;          System.out.println(d++);          int nn[] = new int[x.length];          nn[3] = x[0];          x = nn;      }  } | | | |
| Complete the stack and heap diagram, then answer the questions | | | |
| **Stack** | | **Heap** | |
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| What is the output of System.out.println(d); in main? | | | |
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| What is the output of System.out.println(prf[2]); in main? | | | |
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| What is the output of System.out.println(myCir.rad); in main? | | | |
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| What is the output of System.out.println(d++); in the fg method? | | | |
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| **Skill 21.2 Exercise 3** | |
| public class Tester {         public static void main(String[] args){           double b[] = new double[10];           b[3] = 19;           BankAccount myAccount = new BankAccount(79); //sets balance to 79           int y = 39;           method1(y, b, myAccount);  BankAccount anotherAccount = myAccount;  anotherAccount.deposit = 200;// adds 20 to the balance           System.out.println(y + " " + b[3] + " " + myAccount.balance);       }         public static void method1(int x, double a[], BankAccount theAccount){           x = 332;           a[3] = -54;           theAccount.balance = 702;      }  } | |
| Draw the stack-heap diagram for the code block above | |
| **Stack** | **Heap** |
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| Indicate what is printed | |
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