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| Question 01 xx  What is output by the code at right?  A. 11 B. 27 C. 33 D. index out of bounds exception E. 9 | int[] cRay = {33,14,37,11,27};  out.println(cRay[cRay.length-1]); |
| Question 02 xx  What is output by the code at right?  A. 33 B. 11 C. 14 D. index out of bounds exception E. 9 | int[] dRay = {33,14,37,11,27};  out.println(dRay[0]); |
| Question 03xx  What is output by the code at right?  A. 14 B. 11 C. 33 D. index out of bounds exception E. 9 | int[] eRay = {33,14,37,11,27};  out.println(eRay[eRay.length]); |
| Question 04xx  What is output by the code at right?  A. 14 B. 11  C. 33 D. 27  E. 9 | int[] fRay = new int[10];  fRay[0] = 33;  fRay[1] = 14;  fRay[2] = 37;  fRay[3] = 11;  fRay[4] = 27;  out.println(fRay[0]); |
| Question 05xx  What is output by the code at right?  A. 4 B. 11  C. 9 D. 5  E. 10 | int[]gRay = new int[10];  gRay[0] = 33;  gRay[1] = 14;  gRay[2] = 37;  gRay[3] = 11;  gRay[4] = 27;  out.println(gRay.length); |
| Question 06xx  What is output by the code at right?  A. 10 B. 11  C. 9 D. 5  E. 31 | int[] hRay = {33,14,37,11,27,4,6,2,6};  out.println(hRay.length); |
| Use the following code for questions 07-09  int[] array = {7,8,10,11,4,3};  array[array[0]/2]=15;  array[array[4]+1]=9;  array[array.length/2-1]=5;  array[1]=array[0]+4; | |
| Question 07xx  After running the code shown above, what is output by the following code?  out.println(array[2]);  A. 5 B. 11 C. 7 D. 9 E. 15 | |
| Question 08 xx  After running the code shown above, what is output by the following code?  out.println(array[0]);  A. 5 B. 11 C. 7 D. 9 E. 15 | |
| Question 09 xx  After running the code shown above, what is output by the following code?  out.println(array[5]);  A. 5 B. 11 C. 7 D. 9 E. 15 | |
| Use the following code for questions 10-12  int[] jRay = {5,10,3,6,9,15};  for(int i=0; i < jRay.length/2; i=i+2)  {  jRay[i]= jRay[jRay.length-i-1];  } | |
| Question 10 xx  After running the code shown above, what is output by the following code?  out.println(jRay[0]);  A. 15 B. 9 C. 10 D. 5 E. 6 | |
| Question 11 xx  After running the code shown above, what is output by the following code?  out.println(jRay[1]);  A. 15 B. 9 C. 10 D. 5 E. 6 | |
| Question 12 xx  After running the code shown above, what is output by the following code?  out.println(jRay[4]);  A. 15 B. 9 C. 10 D. 5 E. 6 | |

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| Question 13xx  Which of the following ArrayList methods will change the value of a location in an ArrayList?  A. add() B. remove() C. get() D. set() E. None of these | |
| Question 14 xx  Which of the following ArrayList methods will insert a new value at a location in an ArrayList?  A. get() B. remove() C. set() D. add() E. None of these | |
| Question 15 xx  Which of the following ArrayList instantiations would create an ArrayList that could store doubles?  A. ArrayList<double> aList = new ArrayList<double>();  B. ArrayList<Integer> aList = new ArrayList<Integer>();  C. ArrayList<Double> aList = new ArrayList<Double>();  D. ArrayList<Boolean> aList = new ArrayList<Boolean>();  E. None of these | |
| Question 16 xx  Which of the following ArrayList methods returns the number of elements currently stored in the ArrayList?  A. count() B. size() C. length() D. length E. None of these | |
| Question 17xx  Which of the following ArrayList methods returns the element at a specified index position?  A. indexOf() B. contains() C. get() D. set() E. None of these | |
| Question 18xx  What is the output?  A. 8 5 B. [8, 5] C. 5 8 D. [5, 8]  E. None of these | ArrayList<Integer> fList;  fList = new ArrayList<Integer>();  fList.add(5);  fList.add(8);  out.println(fList); |
| Question 19xx  What is the output?  A. [three]  B. [three, two, one]  C. [one]  D. [one, two, three]  E. None of these | ArrayList<String> gList;  gList = new ArrayList<String>();  gList.add("one");  gList.add("two");  gList.add("three");  System.out.println(gList); |
| Question 20xx  What is the output?  A. [one, two, three]  B. [one]  C. [three, two, one]  D. [three]  E. None of these | ArrayList<String> hList;  hList = new ArrayList<String>();  hList.add(0,"one");  hList.add(0,"two");  hList.add(0,"three");  System.out.println(hList); |
| Question 21x  What is the output?  A. [2.5, 5.3, 9.0]  B. [9.0, 5.3, 2.5]  C. [9.0]  D. [2.5]  E. None of these | ArrayList<Double> mList;  mList = new ArrayList<Double>();  mList.add(2.5);  mList.add(5.3);  mList.add(9.0);  System.out.println(mList); |
| Question 22xx  What is the output?  A. one  B. [three, two, one]  C. [one, two, three]  D. three  E. None of these | ArrayList tList = new ArrayList();  tList.add("one");  tList.add("two");  tList.add("three");  System.out.println(tList.get(0)); |
| Question 23 xx  What is the output?  A. one two three  B. three two one  C. e e e  D. error  E. None of these | ArrayList<String> thatList;  thatList = new ArrayList<String>();  thatList.add("one");  thatList.add("two");  thatList.add("three");  for(String s : thatList)  out.print(s + " ");  out.println(); |
| Question 24 xx  What is the output?  A. one two three  B. three two one  C. one D. error E. None of these | ArrayList objList = new ArrayList();  objList.add("one");  objList.add("two");  objList.add("three");  for(int i=objList.size(); i>=0; i--)  out.print(objList.get(i) + " ");  out.println(); |
| Question 25 xx  What is the output?  A. 2 B. 1  C. 0 D. 4  E. 3 | ArrayList funList = new ArrayList();  funList.add(0,"one");  funList.add("two");  funList.add(0,"three");  funList.add("four");  funList.add(0,"five");  System.out.println(funList.indexOf("four")); |
| Question 26 xx  What is the output?  A. one  B. two C. four  D. three  E. five | ArrayList<String> badList;  badList = new ArrayList<String>();  badList.add(0,"one");  badList.add("two");  badList.set(0,"three");  badList.add(1,"four");  badList.set(1,"five");  out.println(badList.get(0)); |
| Question 27 xx  What is the output?  A. five  B. two C. three  D. four  E. one | ArrayList<String> theList;  theList = new ArrayList<String>();  theList.add(0,"one");  theList.add("two");  theList.set(0,"three");  theList.add(1,"four");  theList.set(1,"five");  out.println(theList.get(1)); |

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| Question 28xx  Which of the following would correctly fill  blank **<\*1>**  to assign the first letter of each String to variable letter?  A. (String)ws.get(x).charAt(0); B. (String)ws.get(x);  C. ((String)ws.get(x)).charAt(0); D. ((String)ws.get(x).charAt(0)); E. ((String)ws.get(x)); | ArrayList ws = new ArrayList();  //add String references to ws  int count=0;  for(int x=0; x<ws.size(); x++)  {  char letter = **<\*1>**  if(letter == 's')  count++;  } |
| Question 29 xx  Which of the following would fill blank **<\*1>** to add a new It to itListOne?  A. itListOne.add(56);  B. itListOne.add(It(56));  C. itListOne.add(new It(56));  D. itListOne.add(new 56);  E. more than one of these | public class It{  private int stuff;  public It(int x){  stuff=x;  }  public String toString(){  return ""+stuff;  }  }  **//code in client class**  ArrayList<It> itListOne;  itListOne = new ArrayList<It>();  **<\*1>** |
| Question 30 xx  What is the output?  A. [one]  B. [two, one, one] C. [two, one]  D. [one, two, one]  E. [two] | ArrayList<String> whatList;  whatList = new ArrayList<String>();  whatList.add("one");  whatList.add("two");  whatList.add("one");  whatList.add("one");  whatList.add("one");  int spot=0;  while(spot<whatList.size())  {  if(whatList.get(spot).equals("one"))  whatList.remove(spot);  else  spot++;  }  out.println(whatList); |

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| Question 31 xx  Consider the following instance variable and incomplete method.  The method sum should sum up all of the values in list.  private ArrayList<Double> list; //assume the array contains values  public double sum()  {  double sum = 0;  /\* code \*/  return sum;  }  Which of the following code segments shown below could be used to replace /\* code \*/ so that sum will work as intended?  I. for ( int i = 0; i < list.size(); i++)  sum = sum + list.get(i);  II. for ( int i = list.size()-1; i > -1; i--)  sum = sum + list.get(i);  III. for ( int i = 0; i < list.size(); i++)  sum = sum + i;  A. I only  B. II only  C. III only  D. I and III only  E. I and II only |

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| Question 32 xx  Consider the following instance variable and incomplete method.  The method sum should sum up every other value in the list.  private ArrayList<Double> list; //assume the array contains values  public double sumEveryOther()  {  double sum = 0;  /\* code \*/  return sum;  }  Which of the following code segments shown below could be used to replace /\* code \*/ so  that sumEveryOther will sum up every other value as intended?  I. for ( int i = 0; i < list.size()/2; i++)  sum = sum + list.get(i);  II. for ( int i = list.size()-1; i > -1; i = i - 2)  sum = sum + list.get(i);  III. for ( int i = 0; i < list.size(); i = i + 2)  sum = sum + list.get(i);  A. I only  B. II and III only  C. III only  D. I and III only  E. I, II, and III |

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| Question 33 xx    Consider the following code segment designed to merge two arrays into one ArrayList.  public static ArrayList<Integer> merge(int[] one, int[] two)  {  ArrayList<Integer> list;  list = new ArrayList<Integer>();  for(int i = 0; i < one.length; i++)  list.add( i, one[i] );  for(int j = 0; j < two.length; j++)  list.add( one.length + j, **/\* line 1 \*/** );  return list;  }  Which of the following can be used to replace **/\* line 1 \*/** so that the merge will work as intended?  I. two[ i ]  II. two[ one.length - two.length ]  III. two[ j ]  A. I only  B. II only  C. I and II only  D. II and III only  E. III only |

**DIRECTIONS :** Fill in each blank with the correct answer/output. Assume each statement happens in order and that one statement may affect the next statement.

public class Grade{

//data not shown

public Grade(double g){

//code not shown

}

public char getLetter(){

//code not shown

}

public String toString(){

return ""+String.format("%.2f",grade);

}

}

//test code in a client class

//instantiate an ArrayList of Grade references

//write the code to load in 8 Grade references – use a for loop

//write the code to print out each of the 8 Grades

//write the code to print out each of the 8 Grades as a letter

**PART 1 : Show the output of each block of code below.**

1. What is the output?

ArrayList<Integer> list = new ArrayList<Integer>();

list.add(3);

list.add(6);

list.add(5);

list.add(8);

list.add(12);

int count=0;

for(int spot=0; spot<list.size(); spot++){

if(list.get(spot)%2==0)

count++;

}

out.println(count);

**PART 2 :** Fill in the method below with the appropriate code.

1.

//this method will return the number

//of times num is present in rayList

public int numCount(ArrayList<Integer> rayList, int num)

{