**1. Which of these operators is used to allocate memory to array variable in Java?**  
a) malloc  
b) alloc  
c) new  
d) new malloc

**Answer:c**  
Explanation: Operator new allocates a block of memory specified by the size of an array, and gives the reference of memory allocated to the array variable.

**2. Which of these is an incorrect array declaration?**  
a) int arr[] = new int[5]  
b) int [] arr = new int[5]  
c) int arr[] = new int[5]  
d) int arr[] = int [5] new

**Answer: d**  
Explanation: Operator new must be succeeded by array type and array size.

**3. What will be the output of the following Java code?**

**int** arr[] = **new** **int** [5];

System.out.print(arr);

a) 0  
b) value stored in arr[0]  
c) 00000  
d) Class name@ hashcode in hexadecimal form

**Answer: d**  
Explanation: If we trying to print any reference variable internally, toString() will be called which is implemented to return the String in following form:  
classname@hashcode in hexadecimal form

**4. Which of these is an incorrect Statement?**  
a) It is necessary to use new operator to initialize an array  
b) Array can be initialized using comma separated expressions surrounded by curly braces  
c) Array can be initialized when they are declared  
d) None of the mentioned

**Answer: a**  
Explanation: Array can be initialized using both new and comma separated expressions surrounded by curly braces example : int arr[5] = new int[5]; and int arr[] = { 0, 1, 2, 3, 4};

**5. Which of these is necessary to specify at time of array initialization?**  
a) Row  
b) Column  
c) Both Row and Column  
d) None of the mentioned

**Answer: a**  
Explanation: None.

**6. What will be the output of the following Java code?**

1. **class** array\_output
2. {
3. **public** **static** **void** main(String args[])
4. {
5. **int** array\_variable [] = **new** **int**[10];
6. **for** (**int** i = 0; i < 10; ++i)
7. {
8. array\_variable[i] = i;
9. System.out.print(array\_variable[i] + " ");
10. i++;
11. }
12. }
13. }

a) 0 2 4 6 8  
b) 1 3 5 7 9  
c) 0 1 2 3 4 5 6 7 8 9  
d) 1 2 3 4 5 6 7 8 9 10

**Answer: a**  
Explanation: When an array is declared using new operator then all of its elements are initialized to 0 automatically. for loop body is executed 5 times as whenever controls comes in the loop i value is incremented twice, first by i++ in body of loop then by ++i in increment condition of for loop.  
output:

$ javac array\_output.java

$ java array\_output

0 2 4 6 8

**7. What will be the output of the following Java code?**

1. **class** multidimention\_array
2. {
3. **public** **static** **void** main(String args[])
4. {
5. **int** arr[][] = **new** **int**[3][];
6. arr[0] = **new** **int**[1];
7. arr[1] = **new** **int**[2];
8. arr[2] = **new** **int**[3];
9. **int** sum = 0;
10. **for** (**int** i = 0; i < 3; ++i)
11. **for** (**int** j = 0; j < i + 1; ++j)
12. arr[i][j] = j + 1;
13. **for** (**int** i = 0; i < 3; ++i)
14. **for** (**int** j = 0; j < i + 1; ++j)
15. sum + = arr[i][j];
16. System.out.print(sum);
17. }
18. }

a) 11  
b) 10  
c) 13  
d) 14

**Answer: b**  
Explanation: arr[][] is a 2D array, array has been allotted memory in parts. 1st row contains 1 element, 2nd row contains 2 elements and 3rd row contains 3 elements. each element of array is given i + j value in loop. sum contains addition of all the elements of the array.  
output:

$ javac multidimention\_array.java

$ java multidimention\_array

10

**8. What will be the output of the following Java code?**

1. **class** evaluate
2. {
3. **public** **static** **void** main(String args[])
4. {
5. **int** arr[] = **new** **int**[] {0 , 1, 2, 3, 4, 5, 6, 7, 8, 9};
6. **int** n = 6;
7. n = arr[arr[n] / 2];
8. System.out.println(arr[n] / 2);
9. }
10. }

a) 3  
b) 0  
c) 6  
d) 1

**Answer: d**  
Explanation: Array arr contains 10 elements. n contains 6 thus in next line n is given value 3 printing arr[3]/2 i:e 3/2 = 1 because of int Value, by int values there is no rest. If this values would be float the result would be 1.5.  
output:

$ javac evaluate.java

$ java evaluate

1

**9. What will be the output of the following Java code?**

1. **class** array\_output
2. {
3. **public** **static** **void** main(String args[])
4. {
5. **char** array\_variable [] = **new** **char**[10];
6. **for** (**int** i = 0; i < 10; ++i)
7. {
8. array\_variable[i] = 'i';
9. System.out.print(array\_variable[i] + "");
10. }
11. }
12. }

a) 1 2 3 4 5 6 7 8 9 10  
b) 0 1 2 3 4 5 6 7 8 9 10  
c) i j k l m n o p q r  
d) i i i i i i i i i i

**Answer: d**  
Explanation: None.  
output:

$ javac array\_output.java

$ java array\_output

i i i i i i i i i i

**10. What will be the output of the following Java code?**

1. **class** array\_output
2. {
3. **public** **static** **void** main(String args[])
4. {
5. **int** array\_variable[][] = {{ 1, 2, 3}, { 4 , 5, 6}, { 7, 8, 9}};
6. **int** sum = 0;
7. **for** (**int** i = 0; i < 3; ++i)
8. **for** (**int** j = 0; j < 3 ; ++j)
9. sum = sum + array\_variable[i][j];
10. System.out.print(sum / 5);
11. }
12. }

a) 8  
b) 9  
c) 10  
d) 11

**Answer: b**  
Explanation: None.  
output:

$ javac array\_output.java

$ java array\_output

9

**Q1.Explain concept of Multidimensional Array with example.**

**Q2.Explain concept of passing arrays to method and returning array from method.**

**Q3.WAP to perform addition of two matrices.**

**Q4.WAP to explain the concept of array of non-primitive data type.**

**Q5.WAP to input array from user then display elements from array.**