

Chapter -9

Working with Array and String

1. What do we call the basic data type which can store only one value at a time?
a) **Scalar variable** b) Local variable c) Static variable d) Instance variable
2. What do we call the data type that can be used to store a collection of more than one data values?
a) Scalar b) **Composite** c) Constructor d) Basic
3. Which of the following is a variable representing a collection of homogeneous type of elements?
a) **Array** b) Method c) Class d) Object
4.is useful to represent vector, matrix, and other multi -dimensional data.
a) **Array** b) Method c) Class d) Object
5.is a 1D data structure that can be used to store list of items in Java.
a) **Vector** b) Matrix c) Composite d) Static
6.is used to represent 2 – D data structure.
a) Vector b) **Matrix** c) Composite d) Static
7. Which of the following is useful when same operation is to be performed on various elements of similar type?
a) **Array** b) Constructor c) Method d) Object
8. How do we identify each element of array?
a) **By an index position** b) By a pointer
c) By memory allocation d) All of above
9. An index position of an array is associated with array
a) class b) **variable** c) Method d) function
10. Creating an array is how many steps process?
a) Declare an array object b) Create an array object
c) declare an array class d) **Both a and b**
11. An array object can be created in how many ways?
a) Using new operator and specifying the size
b) Directly initializing the content of array
c) Specify the size d) **Both a and b**
12. To declare 1-D array we use a pair ofbrackets after array name or after data type.
a) [] b) { } c) () d) < >

13. Write down the syntax to declare array.

Ans. **<data type> <array name>[]; OR <data type> [] <array name>;**

14. Write down the various ways to create Array object named “marks” with size for 5 elements
- a) `int marks[]; marks = new int [5];` b) `int marks [] = new int [5];`
c) `int [] marks = new int [5];` d) **All of above**
15. How many bytes are used to store the `int marks[] = new int [5]` array?
- a) **5 X 4=20** b) `5 X 8=40` c) `5 X 2 =10` d) `5 X 1 =5`
16. What specifies the position of an element in an array?
- a) **index** b) serial c) number d) class
17. If we declare “`int marks[]=new int [5];`” array then what is its first and last element?
- a) **First is marks[0] & Last is marks[4]** b) First is marks[1] & Last is marks[5]
c) First is marks[4] & Last is marks[0] d) First is marks[5] & Last is marks[1]
18. Index value of an array always starts fromnumber.
- a) **0 (zero)** b) 1 c) 2 d) 3
19. 1-D array is initialized usingsign to separate values of data elements inbraces.
- a) **, and { }** b) `;` and `{ }` c) `,` and `()` d) `;` and `()`
20. Which of the following an example of data element of array?
- a) **int marks[]={90,70,77};** b) `int marks[3]={90,70,77};`
c) `int marks []=(90,70,77);` d) `int marks[]={90;70;77};`
21. In java, we can not specify both the size of andvalues of the array elements simultaneously while declaring an array.
- a) dimensions b) initial c) class d) **Both a and b**
22. Various array static methods provided by Java inclass.
- a) **java.util.Arrays** b) `java.util.Array` c) `java.io.Arrays` d) `java.util.io.Arrays`
23. Which method to sort entire or part of array?
- a) **sort()** b) `Short()` c) `fill()` d) `unique()`
24. Which method is used to fill the whole or partial array with specified value?
- a) **fill()** b) `sort()` c) `put()` d) `short()`
25. If you want to assigns value 7 to all elements of list array then which method is used?
- a) **fill (list, 7)** b) `fill (ls,7)` c) `sort(list,7)` d) `fill(7)`
26. What will done with command “`fill (list, 2,6,5);`”.
- a) **Assigns array list value 5 to element list [2] to list[6-1]**
b) Assigns array list value 6 to element list [2] to list[5-1]
c) Assigns array list value 5 to element list [5] to list[6-1] d) None of these

27. To search an element in an array then array class provides which method?
 a) Linear search b) **binarySearch()** c) binary d) search()
28. Which method in Java, is used to search element by element comparison in a serial fashion?
 a) **Linear search** b) binarySearch() c) binary d) find()
29. Which of the following arrays are used to store tabular data in the form of rows and columns?
 a) 1D b) **2D** c) single d) three dimension
30. If we write “int marks [][]=new int [5][3]” then which view shows the elements of array in a table of 5 rows and 3 columns?
 a) **Logical view** b) Physically view c) index view d) Display view
31. In Java, which view of array is stored in memory using contiguous memory?
 a) Logical view b) **Physically view** c) index view d) Display view
32. In statement “int marks [][]=new int [5][3]” occupy how many memory?
 a) **15 (5*3) integers that store 60 (15*4) bytes**
 b) 15 (5*3) integers that store 15 bytes
 c) 15 (5*3) integers that store 30 (15*2) bytes
 d) 15 (5*3) integers that store 0 bytes
33. Java does not supporttype of an array.
 a) 1D b) 2D c) **multi-dimensional** d) Both b and c
34. To initialize 2-D array, all these initialized rows are to be enclosed in braces.
 a) **Curly {}** b) Square [] c) circle () d) angular < >
35. In 2-D array all elements in curly braces are separated bysign.
 a) **comma (,)** b) semicolon (;) c) colon (:) d) dot (.)
36. Size of each row can be known using property of 1-D array.
 a) length b) size c) width d) row
37. Declaring an array withoutdoes not create an array object.
 a) **initialization** b) Declaration c) Instantiation d) None of these
38. 1-D array of characters can be considered as a.....
 a) integer b) character c) **String** d) long
39. Java supports two .types of strings that are handled by which of the following class?
 a) String b) StringBuffer c) character d) **Both a and b**

40.constructor is used without arguments create a string object with no character.
 a) **String ()** b) str() c) string() d) char()
41. Which type of constructor creates a string object with its initial values using array argument?
 a) **String (char ary[])** b) String (char ary[], int start, int len)
 c) String (String strObj) d) String (string literal)
42. Which of the following constructor creates a String object using 1-D array argument starting at ary [start] with len number of character?
 a) String (char ary[])
 b) **String (char ary[], int start, int len)**
 c) String (String strObj) d) String (string literal)
43. Which of the following constructor creates a String object which is same as object specified in argument?
 a) String (char ary[])
 b) String (char ary[], int start, int len)
 c) **String (String strObj)** d) String (string literal)
44. Which of the following constructor creates a String object that refers to the literal specified in argument?
 a) String (char ary[])
 b) String (char ary[], int start, int len)
 c) String (String strObj) d) **String (string literal)**
45. When two String objects are created using same string literals, memory space is not allocated for object.
 a) **second** b) first c) zero d) null
46. Separate memory is allocated when string objects are created usingoperator.
 a) **new** b) obj c) static d) private
47. What happen when we create a String object st1 and st2 without using new operator?
 a) **st1 and st2 refer to the same instance as created for st1.**
 b) Both st1 and st2 refer to different memory location.
 c) Only st2 refer to different memory location.
 d) Only st1 refer to different memory location.
48. What happen when we create a String object st1 and st2 using new operator?
 a) st1 and st2 refer to the same instance as created for st1.
 b) **Both st1 and st2 refer to different memory location.**
 c) Only st2 refer to different memory location.
 d) Only st1 refer to different memory location.
49. In statement “String st1=new String(“I love India”);” what do we call st1?
 a) **Reference variable** b) String object
 c) String class d) character class

50. In statement “String st1=new String(“I love India”);” what do we call “I love India”?

- a) **String Object** b) reference variable
 c) string class d) character class

51. Which class provides methods to compare strings, find length of string, combining strings, obtaining sub strings, converting strings, splitting strings, searching for character or pattern in string etc?

- a) **String Class** b) Character class c) Binary class d) bytecode class

52. Match column:

A		B	
1	booleanequals(String str)	a.	Same as Compare To but case insensitive
2	booleanequalsIgnoreCase(String str)	b.	Return 0, >0, <0 integer.
3	intcompareTo(String str)	c.	Return true if invoking string is same as str.
4	intcompareToIgnoreCase(String str)	d.	Return true id invoking string is same as str after ignoring case.

- a) **(1-c, 2-d, 3-b, 4-a)** b) (1-a, 2-d, 3-b, 4-c)
 c) (1-d, 2-a, 3-b, 4-c) d) (1-a, 2-d, 3-c, 4-b)

53. Which method returns an array of characters as byte from invoking string?

- a) int length() b) **byte [] getBytes()** c) String(Bytes) d) getBytes()

54. Match column:

A		B	
1	int length()	a.	Returns a string with all characters of invoking string converted to upper.
2	String concate(String str)	b.	Returns a string with all characters of invoking string converted to lower.
3	String toLowerCase()	c.	Returns character at index position from the invoking string, index considered from 0.
4	String toUpperCase()	d.	Returns number of character in invoking string
5	Char indexAt(int index)	e.	Returns a string after appending str with the invoking string.

- a) (1-c, 2-d, 3-b, 4-e, 5-a) b) **(1-d, 2-e, 3-b, 4-a,5-c)**

55. Which of the following string class method returns number of characters in invoking string?
 a) **int length()** b) int LENGTH() c) int Length() d) Float int length()
56. Date and Calendar class is provided in which of the following package?
 a) java.class b) java.util c) java.dc d) java.dateclass
57. Which class encapsulate both date and time and represents the value using milliseconds precision?
 a) **Date** b) Calendar c) date d) DATE
58. Which of the following Date method constructs Date object using current system time?
 a) Date (long ()) b) **Date()** c) Date (cur()) d) Date [date()]
59. Which method returns a string representing date and time of invoking object?
 a) long getTime() b) **String toString()** c) String() d) Date (Long ElapsedTime)
60. Which method sets new date and time of an object using elapsed time?
 a) **void setTime(long elapsedTime)** b) long getTime()
 c) Date() d) Date(elapsed time)
61. Which method constructs Date object using specified time in milliseconds elapsed since January 1, 1970 GMT?
 a) **Date (long elapsedTime)** b) Date () c) Date(time) d) Time(Date)
62. Which method returns number of milliseconds since January 1, 1970 GMT?
 a) **long getTime()** b) String toString() c) Date() d) Date(Time)
63. Which class can be used to extract detailed calendar information like year, month, minute etc.
 a) Date class b) **Calendar class** c) calendar class d) CALENDAR class
64. Which is the subclass of Calendar class?
 a) **GregorianCalendar** b) gregorianCalendar
 c) cal d) calendargregorian
65. What is the set value of statement “calendar.set(Calendar.DATE,20);”?
 a) set 20 as date of current month b) **Set date to 20 of system month**
 c) set date above 20 of system month d) set date below 20 of system month
66. Which constant of Calendar class set day of calendar month?
 a) **DATE** b) Date () c) date () d) Today()

67. Which constant of Calendar class set minutes?
 a) Minute() b) **MINUTE** c) Min() d) minute()
68. Which constant of Calendar class set seconds?
 a) **SECOND** b) Second () c) second() d) millisecond()
69. Which constant of Calendar class set week number within the month?
 a) **WEEK_OF_MONTH** b) WEEK.OF.MONTH
 c) weekof month d) week-of-month
70. Which constant of Calendar class set week number within the year?
 a) **WEEK_OF_YEAR** b) WEEK.OF.YEAR
 c) weekofyear d) week-of-year
71. Which constant of Calendar class set day number in the year (1 for the first day)?
 a) DAY.OF.YEAR b) **DAY_OF_YEAR** c) day-of-year d) dayofyear
72. Which constant of Calendar class set Day number within a week (1 for Sunday, 7 for Saturday)?
 a) **DAY_OF_WEEK** b) WEEK_OF_DAY c) week-of-week d) day-of-week
73. Which constant of Calendar class is similar as DATE constant?
 a) **DAY_OF_MONTH** b) WEEK_OF_MONTH
 c) day-of-month d) week-of-month
74. Method toString() returns answer in which data type?
 a) char b) **String** c) int d) float
75. Method getTime() returns answer in which data type?
 a) long b) float c) **int** d) String
76. Which constant of Calendar class set 0 (Zero) for AM and 1 for PM?
 a) AM.PM (b) **AM_PM** c) am_pm d) am.pm

77. Match the followings:

A		B	
1	YEAR	a.	Hour in 12 – hour notation.
2	MONTH	b.	Hour in 24 – hour notation.
3	HOUR	c.	Year of calendar.
4	HOUR_OF DAY	d.	Month of calendar.

- a) **(1-c, 2-d, 3-a, 4-b)** b) (1-d, 2-c, 3-b, 4-a)
 c) (1-c, 2-b, 3-d, 4-a) d) (1-a, 2-c, 3-b, 4-d)

78. In which format GregorianCalendar class constructor takes Date values?
 a) MM-DD-YYYY b) **YYYY-MM-DD** c) YY-MM-DD d) MM-DD-YY
79. What is the output of statement "Date();"?
 a) **Current system date and time** b) Only date
 c) Only time d) set date and time
80. If Today is "Tuesday" then what is the output of statement
 "c1.get(Calendar.DAY_OFWEEK);"?
 a) **3** b) 2 c) 1 d) 4
81. What is the output of statement "System.out.println(str1.equals(str2));" if content
 of str1 and str2 is "India"?
 a) **True** b) False c) Yes d) No
82. What is the size of second dimension in an array gseb [5] [3]?
 a) 15 b) **3** c) 5 d) 18
83. Which of the following constructor is used for without argument create a string
 object with no character?
 a) **String[]** b) String{} c) String () d) String< >
84. Which of the following string class method returns true if invoking string is same
 as str?
 a) Boolean Equal (string str) b) **Boolean equals (String str)**
 c) Boolean eq (string str) d) Boolean Eq (string str)
85. Which of the following is useful to represent vector, matrix and other multi-
 dimensional data?
 a) **Array** b) Variable c) Element d) Tag
86. Which of the following refer to the starting index value in arrays?
 a) **0 (zero)** b) 1 c) null d) All of these
87. If int marks[] = {1,2,3,4,5}; is defined in Java then what will be the value of
 marks[3]?
 a) **4** b) 3 c) 2 d) 5
88. Which of the following is not a right statement to declare an array named marks
 in Java?
 a) int marks[] =new int [3] b) int [] marks = new int[3]
 c) **int marks[3] = {50,60,70}** d) int marks[] = {10,20,30}
89. In Java, which of the following methods of string class returns a string after
 appending str with the invoking string?
 a) char indexAt(int index) b) byte[] getBytes()
 c) **String concat (String str)** d) String append(String str)

90. In Java, if 'str' is the object of string class and its content is @Thank GOD@, then what is the value of str.length()?
- a) 9 b) 10 c) **11** d) 8
91. Which method of java.util.Arrays class is used to fill the whole or partial array with specified value?
- a) **fill()** b) sort() c) put() d) print()
92. Which of the following symbol signifies the start and end of a JavaScript block?
- a) semicolon b) square bracket c) **curly bracket** d) round bracket
93. In Java, compareTo(String str) method returns which value if invoking string is equal to str?
- a) **0 zero** b) > 0 c) <0 d) -1

Textbook Exercise

1. Which of the following refers to the starting index value in array?
- a) **0** b) 1 c) null d) All of these
2. What is the size of second dimension in an array sales [5][12]?
- a) 5 b) **12** c) 60 d) 10
3. What will expression sales.length return for array sales [5][12]? (Notes: First row)
- (a) **5** b) 12 c) 60 d) 120
4. When an array sales [5][12] is declared without specifying initial values, what is the initial value of sales [0][0]?
- a) **0 (zero)** b) default value c) Compilation Error d) 60
5. What does length refer to for an object of String class?
- a) Attribute b) **Method** c) class variable d) class name
6. If 'str' is the object of String class and its content is "Thank GOD", then what is the value of str.length()?
- a) **9** b) 10 c) 12 d) 8
7. What type of value is returned when we use get method of Calendar class with constant DAY_OF_WEEK as an argument?
- a) **int** b) char c) string d) boolean