

Chapter -7

Java Basics

1. Java is anlanguage.
a) **Object Oriented Programming** b) Procedural programming
c) Basic programming d) All
2. Java was developed by which company in 1991?
a) **Sun Microsystems** b) Microsoft c) Apple d) ABM
3. In Java, who provides basic data types, system I/O capabilities and other utility functions?
a) JDK b) **class libraries** c) JVM d) UML
4. Basic classes are part of the.....
a) **JDK** b) JVM c) UML d) OML
5. Who have classes to support networking, common Internet protocols and interface toolkit functions?
a) **JDK** b) Java Source c) JVM d) UML
6. Java is platform - independent at level.
a) Source b) binary c) Datatype d) **Both a and b**
7. Program's capability of being moved easily from one computer system to another is known as____
a) Interpreter b) **Platform - independent** c) Compiler d) Source code
8. At binary level, platform - independent is possible due to which feature?
a) Bytecode Independent b) **Bytecode Interpreter** c) Compiler d) Source code
9. Programs written in Java are compiled intolanguage.
a) **machine** b) Binary c) Source d) Bytecode
10. In Java virtual computer is known as.....
a) **JVM** b) JDK c) UML d) OML
11. What do we called the machine language which is used for JVM?
a) JavaScript b) **Java bytecode** c) Java Binary code d) Source code
12. What is the only disadvantage of using bytecode?
a) **Slow in execution speed** b) Machine independent
c) virtual language d) None
13. What is the disadvantage of native code?
a) Slow in execution speed b) **Machine independent**
c) Virtual language d) None
14. From the following what is not available in Java?
a) type casting b) **typedef** c) typecode d) Type

15. Java source files are given the..... name as the class they define.
 a) **same** b) different c) double d) linear
16. What is the extension of Java source file?
 a) .class b) **.java** c) .javac d) .jvm
17. What happen when program gets compiled without error?
 a) **Creates a class file** b) Show the output of program
 c) create java file d) create binary file
18. What is the extension of class file?
 a) **.class** b) .java c) .javac d) .jvm
19. When we run the program, the Java interpreter calls which method?
 a) class () b) **main ()** c) string() d) static()
20. The.....routine can call other subroutines that are defined in the same class or even in other classes.
 a) class () b) **main ()** c) string() d) static()
21. Write down the right process of compiling and executing a Java application.
 Ans. **Java Source File - Java Compiler - Java Bytecode File - JVM**
22. Which words means that this routine can be called from outside the program?
 a) private b) **public** c) protected d) packages
23. The rules that determines what is allowed are called theof the language.
 a)**Syntax** b) Keyword c) Literals d) Variables
24. Text in angle bracket is used as athat describes something actual we need to type while writing actual program.
 a) **Place holder** b) keyword c) literals d) variables
25. Function header and the sequence of statements enclosed between which braces?
 a) **{ }** b) < > c) [] d) ()
26. Which can't exists by itself?
 a) function b) **method** c) Main() d) variable
27. Method has to be a part of which section of Java?
 a) **class** b) Literals c) Method d) main()

28. Structure of Java program.

```
public class <class - name>
{
<optional - variable - declarations - and - methods>
public static void main (String [ ] args)
{
```

```

    <statements>
    }
    <optional - variable - declarations - and - methods>
}

```

29. One compulsory class has which public method?
 a) static b) **main** c) Syntax d) Literals
30. Which determines the required memory size, type of values, range of values and type of operations that can be performed.
 a) **Data type** b) Variable c) Literals d) Keyword
31. How many primitive data types are there in Java?
 a) 3 b) 4 c) **8** d) 6
32. Name the primitive data types.
 a) byte, short int, long b) float, double c) char, boolean. d) **All of these**
33. Name the data type which hold the integers.
 a) byte, short b) int c) long d) **All of these**
34. Name the data type which hold the real numbers.
 a) float b) double c) Int d) **Both a and b**
35. Which data type hold a single character from Unicode character set?
 a) **char** b) Boolean c) Long d) Double
36. Which data type holds one of the two logical values true or false?
 a) char b) **Boolean** c) Long d) Double
37. Which data types are machine - independent?
 a) **Primitive** b) Non Primitive c) Static d) Public
38.numbers in Java are compliant with **IEEE754**.
 a) **Real** b) Integer c) Character d) String
39. What is the meaning of IEEE754?
 Ans. **An international standard for defining floating - point numbers and arithmetic.**
40. What can store data in memory?
 a) Data type b) **Variable** c) Keywords d) Operators
41. Match the followings.

(A)		(B)	
1	byte	a	8 bytes
2	short	b	4 bytes
3	int	c	1 byte
4	double	d	2 bytes

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

42. Which of the following refers to the same memory location?

- a) **Variable** b) Data type c) Literals d) Values

43. Which can take different data values at different times during the executing of the program?

- a) **Variable** b) Data type c) Literals d) Values

44. Which of the following is the correct syntax to declare variable in Java.

- a) **<type - name> {variable - names};** b) {type - name} <variable - names>;
 c) [type - name] {variable - name}; c) (type-name) <variable - name>;

45. What is denoted by <> in "<type - name> {variable - names};" syntax?

- a) **item to be specified by user** b) List of items c) Value d) Message

46. What is denoted by {} in "<type - name> {variable - names};" syntax?

- a) item to be specified by user b) **List of items** c) Value d) Message

47. What is denoted by {variable-names} in "<type - name> {variable - names};" syntax?

- a) **list of variables** b) data type of variables c) value d) Message

48. What is denoted by <type-name> in "<type - name> {variable - names};" syntax?

- a) list of variables b) **data type of variables** c) value d) Message

49. By which a variable name must be begin with?

- a) Alphabet b) underscore c) dollar sign (\$) d) **All of these**

50. What do we call the words who have special use in Java and cannot be used by the programmer for the other purposes?

- a) Expression b) **Reserved Word** c) Variable d) Boolean

51. Which of the following is the valid variable name in Java.

- 1) birth_date 2) CallCost 3) 4me 4) a1mp3
 5) \$price 6) %date\$ 6) 34Call 7) date_of_joining 8) Name#
 a) 1,2,3,5,7,8 b) **1,2,4,5,8** c) 1,2,4,6,7 d) 1,3,4,5,6

52. What is used for a constant value?

- a) **Literal** b) Variable c) Class d) Objects

53. Which type of literal are used to represent integer or real numbers?

- a) Boolean b) **Numeric** c) String d) character

54. We can force a smaller number to be a long by appending which letter?

- a) **L or l** b) B or b c) A or a d) O or o

55. What is the range of Octal numbers?
 a) 0 to F (0-9 and A-F) base 16 b) **0 to 7 (base 8)** c) 1 to 8 d) 1 to 8 (base 10)
56. What is the range of Hexadecimal number?
 a) **0 to F (0-9 and A-F) base 16** b) 0 to 7 (base 8) c) 1 to 16 d) 1 to 15
57.literals consists of \u followed by 4 hexadecimal digits for ex. the character literal '\u00E9' represents the Unicode character that is an "e".
 a) **Unicode** b) character c) String d) Integer
58. What is the default type of floating point literals?
 a) **double** b) float c) int d) Long
59. To make a literal of type we have to append an **F or f** as a suffix to the number.
 a) **float** b) Double c) Long d) int
60. Which type of literals are not associated with any numeric value?
 a) double b) **Boolean** c) int d) double
61. Boolean type literals has how many literals?
 a) True b) False c) Yes d) **both a and b**
62. Which type of literals are expressed by a single character surrounded by single quotes?
 a) **character** b) Boolean c) String d) int
63. Ais a sequence of characters.
 a) character b) Boolean c) **String** d) int
64. Which type of literals is a sequence of characters enclosed in double quotes?
 a) character b) **string** c) Boolean d) int
65. Within string, special characters can be represented using the
 a) **backslash(\)** b) forward slash(/) c) * d) \$

66. Match the followings.

(A)		(B)	
1	\n	a	Tab
2	\t	b	Backspace
3	\b	c	Carriage return
4	\r	d	New line

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

67. Find out the correct literal type from the list.

(A)		(B)	
1	4L	a	Floating point literal
2	-56	b	String literal
3	0xFF7A	c	Unicode literal
4	\u00E9	d	Scientific notation
5	1.2F	e	Hexadecimal literal
6	"Many, \n\"Congratulations!\n\""	f	Long Integer literal
7	1.24E-107	g	Negative integer

(a) **(1-f, 2-g, 3-e, 4-c, 5-a, 6-b, 7-d)** (b) (1-f, 2-g, 3-c, 4-e, 5-b, 6-d, 7-a)

68. Which statement is ignored by the computer?

- a) Expression b) **Comment** c) Literals d) Variables

69. Which type of comment is begin with double slashes (//) and extends till the end of a line?

- a) **Single-line** b) Multi-line c) document d) None of above

70. What do we use to apply multi-line comment?

- a) /* */ b) **/* */** c) */.....*/ d) //.....*/

71. Which type of comment used to creating API documentation form the code in Java?

- a) **Documentation Comment** b) Multi-line c) Single-Line d) None

72. What do we use to apply documentation comment in Java?

- a) /* */ b) **/** */** c) /**.....**/ d) //

73. The basic building blocks of expressions are.....

- a) literals b) variables c) function d) **All of these**

74. are special symbols used to build an expression.

- a) **Operators** b) Variables c) Literals d) Function

75. Which type of operators can be applied on any type of numeric data?

- a) **Arithmetic** b) Assignment c) Logical d) Conditional

76. In which data type the result of "9*2" is stored?

- a) Float b) **Integer** c) Long d) Double

77. In which data type the result of "9f/2f" is stored?

- a) **Float** b) Integer c) Long d) Double

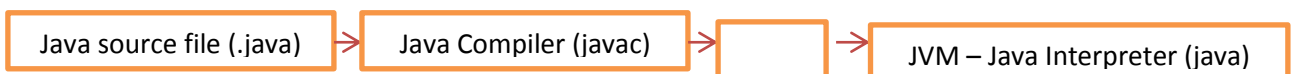
78. What do we call the conversion where lower range data type is implicitly converted to higher data type?
 a) **Type cast** b) Promotion c) Literals d) Variable
79. Which operator can also be used to concatenate a string?
 a) \pm b) * c) - d) #
80. With modulus operator %, if first operand is negative, the result is
 a) **negative** b) positive c) True d) False
81. Which operators are called increment and decrement operators?
 a) **++ and --** b) +/ and -/ c) +, - d) +,-,-
82. What is the output of "x=4; y=3+x++;" code?
 a) x=3, y=6 b) **x=4, y=7** c) x=7,y=4 d) x=4,y=4
83. What is the output of "x=4; y=3+--x;" code?
 a) **x=3, y=6** b) x=4, y=7 c) x=4,y=-1 d) x=4,y=1
84. After applying comparison operator, the result of expression is come in which data type?
 a) Integer b) **Boolean** c) Integer d) Float
85. In which part of programming relational operators are used?
 a) **If statements & loops** b) Body part c) head part d) End part
86. List of logical operations.

No.	Logical Operations	Operators
1	AND	&&
2	OR	
3	XOR	^
4	NOT	!

87. In statement "A && B" if both A and B both are true then what is the result?
 a) **True** b) False c) True d) False
88. In statement "(x==0) || (y==0)" if one is true then what is the result?
 a) **True** b) False c) True d) False
89. Using which operator, we will find opposite result?
 a) XOR b) **NOT** c) OR d) AND
90. Without the....., there would have been a "**division by zero**" error at runtime.
 a) **short - circuiting** b) Type cast c) Expression d) All of these

91. Which operator is used as assignment operator?
 a) = b) = = c) >= d) <=
92. Which operator is used as conditional operator?
 a) **? and :** b) % and ? c) : and ? d) ? and ?
93. What is the output of "(N%2 ==0) ? (N/2) : (3*N+1)" code where N=8?
 a) 25 b) **4** c) 26 d) 2
94. What is the shorthand assignment of "a=a+b" code?
 a) **a+=b** b) a+=b c) a++=b d) a==b
95. What is the full form code of "q &&=p" shorthand assignment?
 a) p=q && p b) **q=q && p** c) p=p & q d) p==q
96. Which facilities of Java we may use when we want to force a conversion that wouldn't be done automatically?
 a) **Type cast** b) Promotion c) Literals d) Data type
97. What do we call the statement that enable to control the flow of execution?
 a) Loops b) **Control Structures** c) Inheritance d) Aggrigation
98. Which statement is a group of statements enclosed between a pair of braces {}?
 a) **block** b) Loops c) If d) Switch
99. Which statement is used when there are many alternative actions to be taken depending upon the value of a variable or expression?
 a) If b) **switch** c) While d) For
100. Incase , if a match is found, the respective case statement are executed.
 a) **switch** b) If c) For d) While
101. In switch case , if no match is found, when which statement is executed?
 a) **default** b) loop c) control d) While
102. Java support 3 types of looping constructs:
 a) for b) while c) do.... while d) **All of these**
103. In which loops, test expression is evaluated first and the statements in the loop are executed if condition is true.
 a) for & do ... while b) **for & while** c) If d) Switch case
104. Which loops are called entry - controlled or pre - test loop constructs?
 a) **for & while** b) while & do ... while c) If d) Switch case
105.loop is exit - controlled or post - test loop constructs.
 a) **do while** b) While c) For d) If

106. The.....statement is used to transfer the control outside switch or loop structure.
- a) **break** b) Continue c) case d) For
107. In a loop,statement is used to exit the loop.
- a) **break** b) Continue c) case d) For
108. Which class defines a whole set of mathematical operations?
- a) **Math** b) Mathematical c) ams math d) mathc
109. If we want to control which loop to break and which loop to reiterate, we can use
- a) **Labeled loops** b) Labeled break c) break d) Continue
110. To use a labeled loop, add the label followed bybefore the loop.
- a) **colon (:)** b) semi colon(;) c) comma (,) d) dash (-)
111. Use ofstatement is used to skip the following statements in a loop and continue with the next iteration.
- a) break b) **Continue** c) case d) For
112. Which of the following is an example of If statement?
- a) Branching b) decision c) selective d) **All of these**
113. In Java, how many levels of visibility modifiers are available for access control?
- a) 2 b) **4** c) 8 d) 6
114. Which of the following editor is used to create Java file in Ubuntu?
- a) **Scite** b) Calc c) Writer d) Wordpad
115. Which of the following is right when Java file is created?
- a) Name must start with Number '2' Only
b) Java source file & class name must be different.
c) Java source file & class name must be same.
d) Name must have symbol '\$' at the end.
116. Which of the following is comment statement in Java?
- a) **/* ...*/** b) /#....#/ c) *....*\ d) /*...../*
117. Which of the following command is given in JDK using Java interpreter?
- a) **java CallCost** b) run CallCost c) javarc CallCost d) javac CallCost
118. Which of the following is missing from compilation process to execute Java application?



- a) Java Bookcode file (*.cla) b) Java Bitecode file(*.csc)
c) **JavaBytecode file (*.class)** d) Java Compilercode (*.Javacr)

Textbook Exercise

- How many basic (primitive) data types are supported in Java?
a) 2 b) 4 c) 16 d) **8**
- What is the default data type of floating point literal?
a) Int b) long c) Float d) **double**
- Which character set is used for char data type in Java?
a) **Unicode** b) ASCII c) EBCDIC d) All of These
- Which of the following is not allowed as first character in valid variable name?
a) **Digit** b) Underscore c) Letter d) Dollar
- Which of the following is compiled error free?
a) for (; ;){int i=7}; b) While(1) {int i=7};
c) While(true){int i=7} d) **All of these**
- Which is not a basic data type in Java?
a) char b) long c) Letter d) **string**
- What is the default value of Boolean type data?
a) null b) true c) **false** d) 0
- What will be the result of arithmetic expression $7/2$?
a) **3.5** b) 3 c) 1 d) 0
- What will be the result of arithmetic expression $-7\%2$?
a) -3 b) **-1** c) 1 d) -3.5
- What will be the result of arithmetic expression $-7.5\%2$?
a) -3 b) **-1.5** c) 1.5 d) Error