



## INDIAN SCHOOL AL WADI AL KABIR

Class: IX	DEPARTMENT OF COMPUTER SCIENCE
Topic: Introduction to JAVA programming: Getting Started with IDE	Question Bank - 2

### FILL IN THE BLANKS:

- 1) **Binary** operators require two operands in java expressions.
- 2) **Byte.parseByte()** is used to convert a string values into a byte type value.
- 3) The Logical OR operator is represented by **||**
- 4) **Relational** operators are used to determine the relationship between different operands.
- 5) The number of relational operators in Java is **Six**.
- 6) **Logical** operators are those operators which connect expressions.
- 7) **Integer.parseInt()** is used to convert a string values into a Integer type value.
- 8) **Parse()** method help to convert string into different numeric types.
- 9) A **unicode** is a two-byte character code set that has characters representing almost all characters in all the languages.
- 10) \t stands for **horizontal tab**.
- 11) **Selection** and **sequence** are the two programming constructs available in Java.

### STATE TRUE OR FALSE:

- 1) In if...else statement, if and else statement should be terminated with semicolon. **F**
- 2) In Addition Shorthand operator (+=), It adds right operand to the left operand and assign the result to left operand. **T**
- 3) != is an equality operator. **F**
- 4) >= operator checks if the value of left operand is greater than or equal to the value of right operand, if yes then condition becomes true. **T**
- 5) In Sequential construct, the statements are executed one by one. **T**
- 6) A setText() method stores or changes text in a text based GUI component. **T**
- 7) Selection statements are executed based upon the test condition. **T**

**MATCH THE FOLLOWING:**

- |   |                              |   |  |
|---|------------------------------|---|--|
| 1 | Byte.parseByte(String s)     | a | To convert a string values into a Long type value    |
| 2 | Integer.parseInt(String s)   | b | To convert a string values into a Double type value  |
| 3 | Float.parseFloat(String s)   | c | To convert a string values into a byte type value    |
| 4 | Double.parseDouble(String s) | d | To convert a string values into a Integer type value |
| 5 | Long.parseLong(String s)     | e | To convert a string values into Float type value     |

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

**ANSWER THE FOLLOWING:**

1) What are the different types of arithmetic operators in JAVA? Give examples.

The different arithmetic operators are:

ADDITION OPERATOR (+)	eg: a+b,4+5
SUBTRACTION OPERATOR (-)	eg: a-b ,5-3
MULTIPLICATION OPERATOR (*)	eg: a* b, 5* 3
DIVISION OPERATOR (/)	eg:a/b ,6/3
MODULUS OPERATOR (%)	eg:a%b ,6%3

2) What are the different data types available in Java?

There are two data types available in Java:

- Primitive Data Types
- Reference/Object Data Types

The different type of primitive data type is

Numeric Integral primitive types ----- int, short, byte, long

Fractional Integral primitive types-----float, double

Character Integral primitive types-----char

Boolean Integral primitive types-----Boolean

3) Define parse() method

parse() methods helps to parse string into different numeric types

eg: Integer.parseInt(String s)

4) Explain Relational operators in JAVA. Give examples.

The relational operators determine the relationship that one operand has to the other. Java provides six relational operators, which are listed in below

< ----- less than

> -----greater than

<= -----less than or equal to

>= -----greater than or equal to

!= -----not equal to

= = -----equal to

5) What is an Identifier? What are the rules for naming an identifier?

All Java components requires names. Names used for classes, variables and methods are called identifiers. In Java, there are several points to remember about identifiers. They are as follows:

- All identifiers should begin with a letter (A to Z or a to z), currency character (\$) or an underscore (\_).
- After the first character identifiers can have any combination of characters.
- A key word cannot be used as an identifier.
- Most importantly identifiers are case sensitive.
- Examples of legal identifiers: age, \$salary, \_value, \_\_1\_value
- Examples of illegal identifiers: 123abc, -salary

6) What are tokens? Name the different types of Token.

The smallest individual unit in a program is known as Token. Java has the following types of tokens:eg keyword, Identifier, literal, punctuators and operators.

7) Explain Logical operators in Java. Give Example.

Sometimes statement in java executed is determined by a combination of several conditions. You can use logical operators to combine these conditions. Logical operators are known as Boolean operators. The different logical operators are:

LOGICAL OR OPERATOR (||)

LOGICAL AND OPERATOR (&&)

LOGICAL NOT OPERATOR (!)

8) Which are the swing components that supports getText() and setText() methods?

jLabel, jTextField, jTextArea, jCheckbox etc.

9) What is selection constructs? Give the syntax of simple if and if...else statements.

A selection statement selects among a set of statements depending on the value of a controlling expression. They are also called as Decision Making Statements. They are: if statements, if else statements

### **If statement syntax**

```
    if (conditional expression)
    {
    Statement /Block;
    }
```

### **If else statement**

```
    if (conditional expression)
    {
    Statement /Block;
    }
    else
    {
    Statement /Block;
    }
```

10) List out the different types of programming constructs in Java.

DIFFERENT TYPES OF PROGRAMMING CONSTRUCTS:

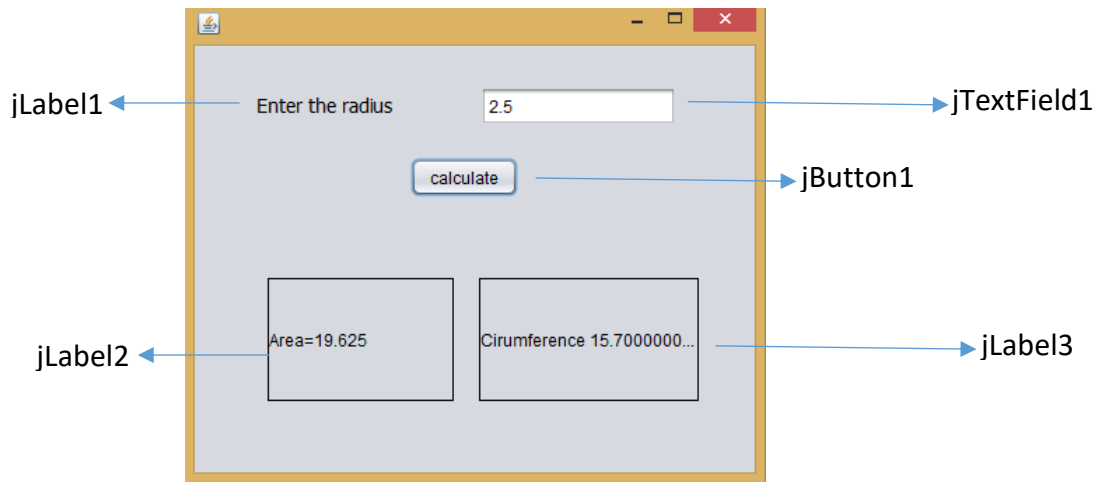
1. SEQUENCE
2. SELECTION

**SEQUENCE CONSTRUCT:** Sequence construct means the statements are being executed sequentially. It is a default flow of statement from top to bottom.

**SELECTION CONSTRUCT:** A selection statement selects among a set of statements depending on the value of a controlling expression. They are also called as **Decision-Making Statements**. They are: if statements, if else statements

## PROGRAMS:

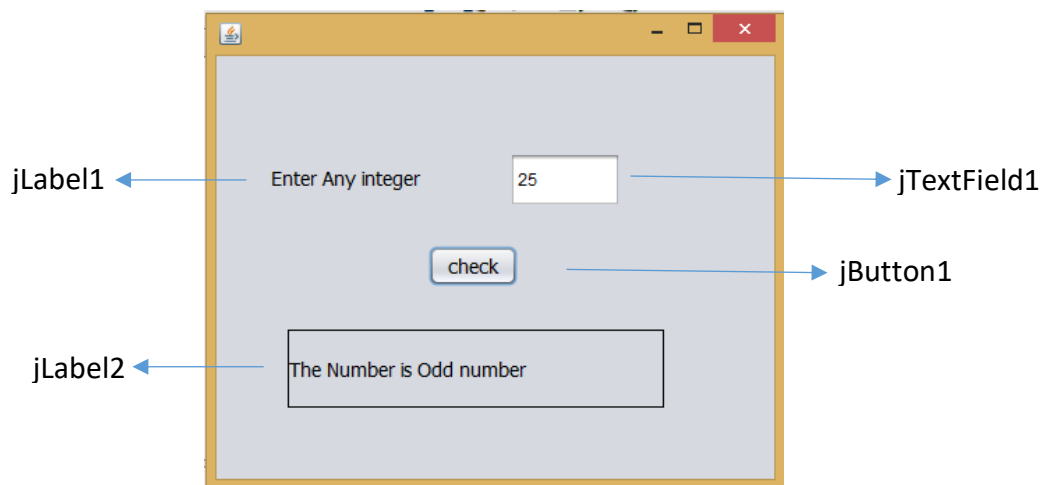
1) Design a java application to find area & circumference of circle.



### CODE FOR CALCULATE BUTTON

```
String t1=jTextField1.getText();  
double r=Double.parseDouble(t1);  
double Area=3.14*r*r;  
double C=2*3.14*r;  
jLabel2.setText("Area="+Area);  
jLabel3.setText("Circumference "+C);
```

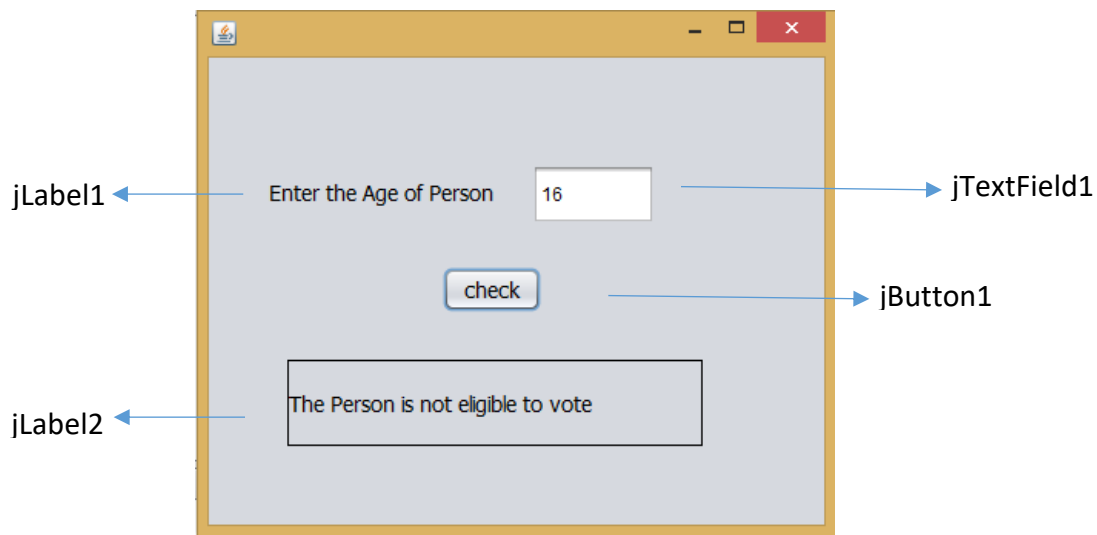
2) Program to find odd or even using if else Statement.



### **CODE FOR CHECK BUTTON:**

```
String t1=jTextField1.getText();  
int n =Integer.parseInt(t1);  
if(n%2==0)  
jLabel2.setText("The Number is Even Number");  
else  
jLabel2.setText("The Number is Odd number");
```

3) Program to design to check the eligibility to vote using if Statement



### **Code for Check Button**

```
String t1=jTextField1.getText();  
int age =Integer.parseInt(t1);  
if(age>=18)  
jLabel2.setText("The Person is eligible to vote");  
if(age<18)  
jLabel2.setText("The Person is not eligible to vote");
```