**Variables and Literals**

**1.**

/\*\*

\* This program demonstrates

\* how to use variables in a program

\*/

public class VariableDemo

{

public static void main(String[] args)

{

// Declare variables to hold data.

int rollno;

String name;

double marks;

// Assign values to variables.

rollno = 19;

name = "David";

marks = 89.8;

// Display the message

System.out.println("Your roll number is " + rollno);

System.out.println("Your name is " + name);

System.out.println("Your marks is " + marks);

}

}

o/p

Your roll number is 19  
Your name is David  
Your marks is 89.8

2.

class Main {

public static void main(String[] args) {

double myDouble = 3.4;

float myFloat = 3.4F;

// 3.445\*10^2

double myDoubleScientific = 3.445e2;

System.out.println(myDouble); // prints 3.4

System.out.println(myFloat); // prints 3.4

System.out.println(myDoubleScientific); // prints 344.5

}

}

**MCQ’s**

**1) What is Literal in Java?**

A) Literal is the value that is given or assigned to a variable.

B) Literal is a data type

C) Literal is similar to String

D) None of the above

Answer [=]

**A**

**Explanation:**

**Examples: 123, 45.67f, 'C', "abc", false**

**2) What are the types of Literals available in Java language?**

A) Integer and Float

B) Character and String

C) Boolean

D) All the above

Answer [=]

**D**

**Explanation:**

**Literals are Data assigned to Primitive data type variables.**

**3) What are the types of Integer Literals in Java?**

A) Decimal Literals

B) Octal and Hexadecimal Literals

C) Binary Literals

D) All the above

Answer [=]

**D**

**Explanation:**

**JDK 7 introduced binary literals to easily set individual bits of a number.**

**4) Choose correct examples of decimal literals in Java.**

A)

int a = 12345;

B)

int a = 12\_3\_\_5;

C)

long a = 987\_\_\_\_654\_3\_\_21L;

D) All the above

Answer [=]

**D**

**Explanation:**

**To represent big numbers, simply append letter 'l' or 'L' to the number to make it a long integer. This avoids compiler errors saying "out of range"**

**5) An Octal number is Java is represented with a leading \_\_\_\_?**

A) O (Alphabet)

B) 0 (ZERO)

C) 0x

D) 0X

Answer [=]

**B**

**Explanation:**

**Eg. int a=0765;**

**6) Choose correct ranges for Decimal, Octal and Hexadecimal numbers in Java?**

A) Decimal: 0 to 9

B) Octal: 0 to 7

C) Hexadecimal: 0 to 9 and A to F / a to f

D) All the above

Answer [=]

**D**

**7) Choose the correct example of Octal Literal in Java?**

A)

short = 0564;

B)

int = 076\_\_45\_2;

C)

int = 0\_\_\_\_\_\_11;

D) All the above

Answer [=]

**D**

**Explanation:**

**int = 0\_\_\_\_\_\_11; // 8^1 \* 1 + 8^0 \* 1 = 9**

**8) What is the prefix used to represent Hexadecimal numbers in Java?**

A) 0x

B) 0X

C) A and B

D) None of the above

Answer [=]

**D**

**Explanation:**

**int a=0xFEB5;**

**int b=0X9876\_\_45;**

**9) Choose correct examples of Hexadecimal literals in Java?**

A)

long a = 0X987654321L;

B)

int a = 0x76FE\_\_\_\_23;

C)

byte b = 0X0\_\_\_\_\_\_\_\_\_\_F;

D) All the above

Answer [=]

**D**

**10) Binary literals in Java are introduced with which version of Java?**

A) JDK 5

B) JDK 6

C) JDK 6

D) JDK 8

Answer [=]

**C**