

Multiple Choice Questions

1. Which choice is the correct option to get user input.

```
class Main {  
    public static void main(String[] Args) {  
        _____ scanner = new Scanner(System.in);  
        String str = scanner._____.  
    }  
}
```

- A) scanner, getLine
- B) Input, nextGet
- C) Scanner, nextLine
- D) Input, nextLine

2. What is the purpose of the Scanner class in Java?

- A) To perform mathematical operations
- B) To read input from the user
- C) To generate random numbers
- D) To convert data types

3. Which of the following is used to read a floating-point number in the Scanner class?

- A) next()
- B) Float()
- C) nextFloat()
- D) next(Float)

4. Correctly declare the following variables.

```
class Main {  
    public static void main(String[] Args) {  
        _____ name = "Octavia";  
        _____ weight = 67;  
        double height = 1.9;  
        _____ BMI = weight / Math.pow(height, 2);  
        Scanner scanner = new Scanner(System.in);  
        _____ isStudent = scanner.nextBoolean();  
        System.out.println(name + "'s BMI is " + BMI);  
    }  
}
```

- A) char, double, int, String
- B) string, double, double, char
- C) String, Int, Double, Boolean
- D) String, int, double, boolean

5. How to correctly get the second last digit of a number? (more than one answer)

```
class Main {  
    public static void main(String[] Args) {  
        int number = 123456;  
        int secondLastDigit = _____;  
        // expected output: 5  
        System.out.println(secondLastDigit);  
    }  
}
```

- A) `(number/100)%10`
 - B) `number % 100`
 - C) `(number%100)/10`
 - D) `(number/10)%10`
-

6. Which of the following choice can NOT be used in the blank to get the result of x / y ?

```
class Main {  
    public static void main(String[] Args) {  
        int result = 0;  
        int x = 15;  
        int y = 4;  
        _____ = x / y;  
    }  
}
```

- A) `x`
 - B) `y`
 - C) `result`
 - D) `int result`
-

7. What is the output of the following code?

```
class Main {  
    public static void main(String[] Args) {  
        int x = 15;  
        int y = 4;  
        double result = x / y;  
        System.out.println(result);  
    }  
}
```

- A) 3.75
- B) 3
- C) 4
- D) 3.0

8. What is the output of the following code?

```
class Main {  
    public static void main(String[] Args) {  
        int x = 15;  
        double y = 4;  
        System.out.println(x / y);  
    }  
}
```

- A) 3.75
 - B) 3
 - C) 3.0
 - D) error
-

9. What is the output of the following code?

```
class Main {  
    public static void main(String[] Args) {  
        double x = 15;  
        int y = 4;  
        System.out.println(x / y);  
    }  
}
```

- A) 3.75
 - B) 3
 - C) 3.0
 - D) error
-

10. Which of the following is the correct way to express the following equation in Java?

$$x_2 = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

```
class Main {  
    public static void main(String[] Args) {  
        double a = 1;  
        double b = 5;  
        double c = 2;  
        double x;  
        _____;  
        System.out.println(x);  
    }  
}
```

- A) `x = (0 - b + Math.pow(Math.sqrt(b), 2) - 4 * a * c) / (2 * a)`
 - B) `x = (-b + Math.sqrt(Math.pow(b, 2) - 4 * a * c)) / (2 * a)`
 - C) `x = 0 - b + Math.sqrt(Math.pow(b, 2) - 4 * a * c) / (2 * a)`
 - D) `x = (-1 * b) + Math.sqrt(Math.pow(b, 2) - 4 * a * c) / 2 * a`
-

Correct Answers

1. C
2. B
3. C
4. D
5. C, D
6. D
7. D
8. A
9. A
10. B