

JAVA Programming Language Homework II

Student ID: Name:

1. Given the following Java code:

```
1.      class A {
2.          public static void main (String[] args) {
3.              Byte tmp1 = new Byte("1");
4.              Byte tmp2 = new Byte("1");
5.              if (tmp1 == tmp2) System.out.println("true,");
6.              else System.out.println("false,");
7.              if (tmp1.equals(tmp2)) System.out.println("true,");
8.              else System.out.println("false,");
9.          }
10.     }
```

What is the result?

- A. false, false
- B. false, true
- C. true, false
- D. true, true
- E. None of the above

Answer:

2. Given the following Java code:

```
1.      class A {
2.          private static int tmp = 1;
3.          static void m(int i) { tmp++; i++;}
4.          public void n(int i) { tmp = tmp + 2;}
5.          static void n() { tmp = tmp + 2;}
6.          public static void main(String[] args) {
7.              int tmp2 = 3;
8.              m(tmp2);
9.              System.out.println(tmp + "," + tmp2);
10.         }
11.     }
```

What is the result?

- A. 1, 3
- B. 2, 3
- C. 1, 4
- D. 2, 4
- E. Compiler Error

Answer:

3. Given the following Java code:

```
1.     class A {
2.         final String s1 = "A.s1";
3.         final String S2 = "Aa.s1";
4.         class B {
5.             String s1;
6.             void m() {System.out.println(???);}
7.             void n() {System.out.println("B");}
8.         }
9.         public static void main(String args[]) {
10.            A g = new A();
11.            g.new B().m();
12.        }
13.    }
```

What field access expression could be used in place of ??? above to cause the program to print "A.s1" ?

- A. s1
- B. A.s1
- C. ((A)this).s1
- D. A.this.s1
- E. None of the above

Answer:

4. Which of the following are legal identifiers?

- A. _3variable
- B. 3_variable
- C. this
- D. super
- E. *variable

Answer:

5. Which are not primitive types in Java?

- A. float
- B. Boolean
- C. short
- D. Double
- E. long

Answer:

6. Given the following Java code:

```
1. interface Count {
2.     short counter = 0;
3.     void countUp( );
4. }
5. public class TestCount implements Count {
6.
7.     public static void main(String[] args) {
8.         TestCount t = new TestCount( );
9.         t.countUp( );
10.    }
11.    public void countUp( ) {
12.        for (int x = 6; x > counter; x--, ++counter) {
13.            System.out.println(" " + counter);
14.        }
15.    }
```

16. }

What is the result?

- A. 0 1 2
- B. 1 2 3
- C. 0 1 2 3
- D. 1 2 3 4
- E. Compiler error

Answer:

7. Given the following Java code:

```
1. Integer i = new Integer(42);  
2. Long l = new Long(42);  
3. Double d = new Double(42.0);
```

Which two expressions evaluate to True?

- A. (i == l)
- B. (i == d)
- C. (i.equals(42))
- D. (i.equals(d))
- E. (d.equals(i))

Answer:

8. Given the following Java code:

```
1. public class ConstOver {  
2.     public ConstOver(int x, int y, int z) {  
3.     }  
4. }
```

Which two overload the ConstOver constructor?

- A. ConstOver() {}
- B. Protected int ConstOver() {}

- C. Private ConstOver(int z, int y, int x){}
- D. public Object ConstOver(int x, byte y, byte z){}
- E. public void ConstOver(byte x, byte y, byte z){}

Answer :

9. Given the following Java code:

```
1.     interface foo {
2.         int k = 0;
3.     }
4.     public class ExamA015 implements foo{
5.         public static void main(String[] args) {
6.             int i;
7.             ExamA015 test = new ExamA015();
8.             i = test.k;
9.             i = ExamA015.k;
10.            i = foo.k;
11.        }
12.    }
```

What is the result?

- A. Compilation succeeds.
- B. An error at line 2 causes compilation to fail.
- C. An error at line 9 causes compilation to fail.
- D. An error at line 10 causes compilation to fail.
- E. An error at line 11 causes compilation to fail.

Answer:

10. Given the following Java code:

```
1.     public class foo {
2.         public static void main (String[] args) {
3.             String s;
4.             System.out.println("s=" + s);
```

```
5.      }  
6.      }
```

What is the result?

- A. The code compiles and “s=” is printed.
- B. The code compiles and “s=null” is printed.
- C. The code does not compile because string s is not initialized.
- D. The code does not compile because string s cannot be referenced.
- E. There is a runtime error.

Answer :