Review Chapter 2

Java Fundamentals

1. Which of the following lines will compile without warning or error.

   1) float f = 1.3;
   2) char c = "a";
   3) byte b = 257;
   4) boolean b = null;
   5) int I = 10;

2. What will be the result when you attempt to compile and run the following code?

   ```java
   public class temp {
       public static void main(String[] args) {
           // Code of letter 'A' is 65 and code of 'B' is 66
           char charVar = 65;
           String sVar;
           sVar = "B" + charVar + 1 ;
           System.out.print (sVar);
       }
   }
   ```

   1) Compile time error
   2) Compilation and output the string "BA1"
   3) Compilation and output the string “BB”
   4) Compilation and output the string "B651"

3. What will be the result when you attempt to compile and run the following code?

   ```java
   public class temp {
       public static void main(String[] args) {
           // Code of letter 'A' is 65 and code of 'B' is 66
           char charVar = 65;
           String sVar;
           sVar = charVar + 1 + "B" ;
           System.out.print (sVar);
       }
   }
   ```
1) Compile time error
2) Compilation and output the string "651B"
3) Compilation and output the string “66B”
4) Compilation and output the string "A1B"

4. What will be the result when you attempt to compile and run the following code?

```java
public class temp {
    public static void main(String[] args) {
        // Code of letter 'A' is 65 and code of 'B' is 66
        float a = 1.2f;
        final int b = 1;
        b = (int) (a+1);
        System.out.print(""+ b +1);
    }
}
```

1) Compile time error
2) Compilation and output the string "3"
3) Compilation and output the string "3.2"
4) Compilation and output the string "21"

5. What will be the result when you attempt to compile and run the following code?

```java
public class temp {
    public static void main(String[] args) {
        final byte a = 128;
        byte b = 2;
        short c = (short)(a + b);
        System.out.println(c);
    }
}
```

1) Compile time error;
2) Compilation and output 130
3) Using cast operator (short) in line 6 is not necessary because Java do widening conversion automatically.
4) Both statement 1) and 3) is correct.

6. Which of the following are legal identifiers

1) 2variable
2) variable2
3) _whatavariable
4) _3_
5) $anothervar
6) #myvar

7. What will happen when you compile and run the following code?

```java
public class temp {
    public void main(String[] args) {
        final int i,j;
        j = (int)(7.99 + 4.01);
        System.out.println(j/3);
    }
}
```

1) Compilation and output 0
2) Compilation and output 4
3) Compile time error.
4) Compile ok but cannot run.

8. If you run the code below, what gets printed out?

```java
public class temp {
    public static void main(String[] args) {
        // code of letter 'A'=65,'B'=66 , 'C'=67,'D'=68, 'E'=69
        String sVar = "ABCDE";
        int iVar = sVar.charAt(2);
        System.out.print(iVar);
        char letter;
        letter = (char) iVar;
        System.out.print(letter);
    }
}
```

1) Compilation and output the string "67C"
2) Compilation and output the string "6666"
3) Compile time error
4) Compilation and output the string "CC"

9. Given the following declarations
String s1=new String("Hello")
String s2=new String("there");
String s3=new String();

Which of the following are legal operations?

1) s3=s1 + s2;
2) s3=s1-s2;
3) s3=s1 / s2;
4) s3=s1 % s2;

10. If you run the code below, what gets printed out?

```java
public class temp {
    public static void main(String[] args) {
        // code of letter 'A'=65
        char c='A';
        c += 1;
        System.out.print(c);
        int i = -4 + 7 % 5 * (13 / 6) + -2;
        System.out.print(i);
    }
}
```

1) Compile time error
2) Compilation and output the string "66-2"
3) Compilation and output the string "B-2"
4) Compilation and output the string "B1"

11. What will be the result when you attempt to compile and run the following code?

```java
public class temp {
    public static void main(String[] args) {
        String s = new String("ello");
        char c='H';
        c += s;
        System.out.println(c);
    }
}
```

1) Compilation and output the string "Hello"
2) Compilation and output the string "ello"
3) Compilation and output the string elloH
4) Compile time error
12. **Given:**

```java
public class Q8 {
    public static void main (String[] args) {
        String s1 = "";
        System.out.println(" " + 4 + 5);
        System.out.println(4 + 5 + " ");
        System.out.println(4 + 5 + " " + 4 + 5);
        System.out.println(" " + 4 + 5 + s1);
    }
}
```

What Output is sent to System.out as a result of typing java Q8 on the command line. Select Four answers?

1. Prints 9 at line 4.
2. Prints 'space' folowed by 45 at line 4.
3. Prints 45 followed by 'space' at line 5.
4. Prints 9 followed by space followed by 9 at line 6.
5. Prints space followed by 45 at line 7.
6. Prints 9 followed by space at line 7.
7. Prints 9 followed by space followed by 45 at line 6.
8. Prints space followed by 9 at line 7.

13. What will be the result when you attempt to compile and run the following code?

```java
public class temp {
    public static void main(String[] args) {
        char a,b;
        int c;
        a = 'A';
        c = 100;
        b = "B";
        c = a + b;
        System.out.println(c);
    }
}
```

1) Compilation and output 100
2) Compilation and output 131
3) There must be a cast operator to convert char to int like this: c = (int)(a+b)
4) Compile time error