Tutorial

Answer the following questions

**True/False**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Java program must have a main</td>
<td></td>
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<tr>
<td>A Java identifier cannot start with a digit</td>
<td></td>
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<tr>
<td>The Java compiler consider the identifier numberOfPersons to be the same as the identifier numberOf persons</td>
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<tr>
<td>A Java reserved word can also be used as programmer-defined identifier</td>
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<tr>
<td>If a program compiles successfully, it is guaranteed to execute correctly</td>
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**Multiple choice**

1- Which of the following is legal string assignment
   a- name = 'Majed'
   b- name = "Majed"
   c- Name = 'Á' +"Majed"

2- Which of the following can be assigned to a char variable
   a- 'd'
   b- '?'
   c- '#'

3- Which assignment statement could be used to store the letter B into the char variable aVariable
   a- aVariable = "B" ;
   b- aVariable = B ;
   c- aVariable = 'B' ;

4- In Java the phrase "standard output device" usually refers to
   a- the keyboard
   b- a floppy disk drive
   c- the display screen
   d- a CD-ROM drive
   e- none of the above

5- Which of the following prints AssalamouAlaikoum on one output line
   a- System.out.println("Assalamou") ;
   System.out.println("Alaikoum") ;
   b- System.out.print("Assalamou") ;
   System.out.println("Alaikoum") ;
   c- System.out.println("AssalamouAlaikoum") ;
Fill in the blanks

1- A programming language is said to be ……………….. if it considers uppercase letters to be different from lowercase letter
2- A …………… is a location memory referenced by an identifier, in which a data value that can be changed is stored
3- A …………… is a name associated with a data and used to refer to that data
4- A ……………………is a specific set of data values along with a set of operations on those values.
5- An …………………… is a statement that stores the values of an expression into a variable
6- A ………………………is a statement that associates an identifier with a data type so that the programmer can refer to that item by name
7- A ………………………is a location in memory, referenced by an identifier, where a data value that cannot be changed is stored
8- The process of determining the calls of an error in a program and correcting the error is called …………….. 
9- ………………………is the formal rules governing how valid instruction are written in a programming language
10- In Java, names appearing in an import are called …………………….files

Writing programs

1- Write a program that displays the sum of two real numbers
2- Knowing that F=9/5C + 32, Write a program that translates any entered degree in Celsius (C) to a Fahrenheit (F) degree
3- Write a program that translates any data entered in hours and minutes and seconds into seconds.
4- Write a program that translates any data entered in minutes into hours and minutes.
5- Write a program that translates any data entered in seconds into hours, minutes and seconds.

True/False

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<td>In Java expression without parentheses, all operations are performed in order from left to right</td>
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<tr>
<td>In Java, the expression (a + b / c)/2 is equivalent to ((a + b) / c)/2</td>
<td></td>
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<tr>
<td>The value of the expression a+b * c+d is different from the value of the expression a + b*c +d</td>
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<tr>
<td>If the int variable someInt contains the value 26, the statement System.out.println(&quot;someInt&quot;); outputs the value 26</td>
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Multiple choice

1. Given that x is a double variable and num is an int variable containing the value 5, what will x contain after execution of the following statement:
   \[ x = \text{num} + 2; \]
   a- 7
   b- 7.0
   c- 5
   d- 5.0
   e- Nothing, a compile-time error occurs

2. Given that x is a double variable containing the value 84.7 and num is an int variable, what will num contain after execution of the following statement:
   \[ \text{num} = x + 2; \]
   a- 86.7
   b- 86
   c- 87
   d- 87.0
   e- Nothing, a compile-time error occurs

3. Given that x is a double variable and num is an int variable containing the value 38, what will x contain after execution of the following statement:
   \[ x = \text{num} / 4 + 3.0; \]
   a- 12.5
   b- 3
   c- 12
   d- 12.0
   e- Nothing, a compile-time error occurs

4. What is the output of the following program fragment
   ```java
   System.out.println("To");
   System.out.print(\');
   System.out.print("Many");
   System.out.println(" students");
   a- To Many students
   b- To Many students
   c- To Many students
   d- To Many students
   e- Nothing, a compile-time error occurs
   ```

5. What is the output of the following program fragment
   ```java
   Age = 29;
   System.out.println("Are you"+ age+ "years old?");
   a- Are you29years old?
   b- Are you 29 years old?
   c- Are you29 years old?
   d- Are you 29years old?
   e- Are you age years old?
   ```