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HW#1

1. This makes Java platform independent because after the program is compiled it can run on any computer that includes interpreter for java virtual machine and the advantage of java is that any computer can execute it even without having to recompile.
2. Steps taken in developing a java program are as follows:

- Choose IDE for java programming such as Eclipse and create a project class file.
- Declare class and main method, the main method public static void main(String[] args) will be executed after the program is ran and even every java program's main method will have similar declaration.
- If you want your program to print out "Hello World", type System.out.println("Hello World");
- "System" notifies the system to do something and "out" tells the system to output, "println" prints the line and the bracket around Hello World is the string that is outputted, and it's important to put semicolon to type semicolon at the end of the line.
- Simply run the program and the screen should output the result and correct your error if the program won't run.

3. Five java reserved words are return, char, absolute, null and void.
4. Primitive date types in Java are int, double, float, char, string, bool, long and byte.
5. A) bottle 99 is valid, r+d is invalid because it shouldn't contain operators, fun class is invalid because spacing is not allowed, FancyTree is valid.

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6. import java.util.Scanner;

```
public class Swapper
{
        static Scanner Input = new Scanner(System.in);


    public static void main(String[] args)
        {
        //declaring integer variables FA and FB
        double FA,FB;
        //prints out the string that asks the user to input FA and FB
        System.out.println("This Program swaps integer FA to FB and FB to FA");
        System.out.println(" Enter FA = ");
        //allows the user to input the value for integer FA
        FA = Input.nextDouble();
        System.out.println("Enter FB = ");
        //allows the user to input the value for integer FB
        FB= Input.nextDouble();
        //temporary variable FC that will copy the value of FA
        double FC=FA;
        //changes the value of FA to FB
        FA=FB;
        //changes the value of FB to FC
        FB=FC;
        //prints out the swapped values
        System.out.println("FA is now " + FA + "\nFB is now " + FC);
        }
```

}

Output

This Program swaps integer FA to FB and FB to FA

Enter FA =

7.0

Enter FB =

8.1

FA is now 8.1

FB is now 7.0

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7. The following code will print on the screen

I like bits

and I like bytes

and I will print

in multiple types.

8.

a. 16
b. 1
c. Error, because double value is assigned in to an integer variable.
d. 5
e. Error, double value is assigned in to a integer variable, int casting must be assigned next to 3.0 to be correct instead of 17.
f. 0.0