I don’t feel comfortable doing video. I want to do audio, but my computer doesn’t come with audio and speaker. I am happy to do audio on school computer that comes with speaker.

Level 3: Triangle-Lesson 6

There are many cases you need to compare string to each other. Using simple equality operator as you do with primitive don’t work the way you expect. I declare two variables.

String s1=” Hello”

String s2= “Hello”

They both have the same value, string “Hello”

I will add simple conditional code. Now I will compare using double equal or equality operator. It works great with primitive numbers, bool, and character. With string it might appears that its woks also.

If(s1==s3) {

System.out.println(“They match”)

} else {

System.out.println (“They don’t match”

}

I got back they match. After all the two strings are identical. But the reason for that match isn’t what you think they are.

Let’s declare another string s3=” hello”. Now compare it with s1 and s3.

If(s1==s3) {

System.out.println(“They match”)

} else{

System.out.println (“They don’t match”

}

Clearly don’t match because one is upper case(s1), and one is lower case(s3). Now try this. I declare string variable named p1 and I give it a value of hello followed by space character. Then I declare variable named p2 and I will give it a value of world.

P1=” Hello “

P2=” World”

Then I create a variable p4 and I create that by concatenating p1 plus p2. Now I have string of hello world.

P4=p1+p2

Now I create another string p5. This would be an entire string “Hello world “

Now those two things p4 and p5 should match.

Now when I executed conditional logic,

If(p4==p5) {

System.out.println(“They match”)

} else {

System.out.println (“They don’t match”)

}

Now I got they don’t match. What is going here? In the first example when I declared s1, it is registered in memory by the compiler. Then when I declared s2, instead of creating a new object, the compiler looked into the existing string and found a match. Instead of creating another object, it points to the second reference variable s2 to the original object s1.

Level 3: Triangle-Lesson 6

In this lesson I need to show the sum of two sides of a triangle is always greater than the third side. Now consider a right-angle triangle with sidea, sideb and sidec with dimension of 3,4, and 5 respectively.

1. sideA + sideB > sideC
2. sideA + sideC > sideB
3. sideB + sideC > sideA

For any combination, the sum of two sides of a triangle is always greater than the 3rd sides.

public static void main(String[] args) {  
 *//write your code here* Scanner input = new Scanner(System.*in*);  
 int sideA = input.nextInt();  
 int sideB = input.nextInt();  
 int sideC = input.nextInt();  
 sideA=3;  
 sideB=4;  
 sideC=5;

*// sideA, SideB and SideC are pass as arguments to isTriangle which has*

*// parameters sideA, sideB and sideC.*

*// It returns true if the triangle exists, false if it doesn't.* if (*isTriangle*(sideA, sideB, sideC)) {  
 System.*out*.println(*TRIANGLE\_EXISTS*);  
 } else {  
 System.*out*.println(*TRIANGLE\_DOES\_NOT\_EXIST*);  
 }  
}  
public static boolean isTriangle(int sideA, int sideB, int sideC) {  
 return sideA + sideB > sideC && sideA + sideC > sideB && sideB + sideC > sideA;  
}