1. Log in
2. Working in Unit 3
   - 1-Dimensional Arrays
   - 2-Dimensional Arrays
   - Array Lists

Oct 28-7:39 PM

Previous Lesson

ArrayList<Type> theListName = new ArrayList(size);

ArrayList<String> ourClassMates = new ArrayList( );

Today's Lesson

ArrayList<Integer> myTestScores = new ArrayList( );

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Remember: import java.util.;*

```
ArrayList<Integer> myTestScores = new ArrayList( );
myTestScores.add(89);
myTestScores.add(77);
myTestScores.add(100);
```

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```
ArrayList<Integer> myTestScores = new ArrayList( );
myTestScores.add(89);
myTestScores.add(77);
myTestScores.add(100);

//Add up all the elements of the list...

int sum=0;
for(int i=0 ; i<myTestScores.size() ; i++)
    sum+=myTestScores.get(i);
```

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//Now let's average the test scores and display the average ...

```
ArrayList<Integer> myTestScores = new ArrayList( );
myTestScores.add(89);
myTestScores.add(77);
myTestScores.add(100);

int sum=0, counter=0;
double avg=0;
for(int i=0 ; i<myTestScores.size() ; i++)
{
   sum+=myTestScores.get(i);
   counter++;
}
avg=(double)sum/counter;
System.out.print(avg);
```

Uses a standard for-loop!

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//Now let's average the test scores and display the average ...

```
ArrayList<Integer> myTestScores = new ArrayList( );
myTestScores.add(89);
myTestScores.add(77);
myTestScores.add(100);

int sum=0, counter=0;
double avg=0;
for(int element : myTestScores)
{
   sum+=elements;
   counter++;
}
avg=(double)sum/counter;
System.out.println(avg);
```

Uses an enhanced for-loop!

Oct 28-7:52 PM

Mathematics: Generate a list of the first 10 squared numbers ...

```
ArrayList<Integer> listOfSquares = new ArrayList();

for(int i=1 ; i<=10 ; i++)
    listOfSquares.add(i*i);
```

Nov 1-2:15 PM

Mathematics: Generate a list of the first 10 squared numbers ...

```
ArrayList<Integer> listOfSquares = new ArrayList();

for(int i=1 ; i<=10 ; i++)
    listOfSquares.add(i*i);

for(int i=0 ; i<listOfSquares.size() ; i++)
    System.out.print(listOfSquares.get(i)+", ");
```

*** Print the list of numbers ***

Nov 1-2:15 PM

Add some user input to generate any number of squares ...

```
ArrayList<Integer> listOfSquares = new ArrayList();

Scanner getUserNumber = new Scanner(System.in);
System.out.println("How many squares should I find: ");
int numberOfSquares = getUserNumber.nextInt();

for(int i=1 ; i<=numberOfSquares ; i++)
    listOfSquares.add(i*i);

for(int i=0 ; i<listOfSquares.size() ; i++)
    System.out.print(listOfSquares.get(i)+", ");
```

Nov 1-2:23 PM

Add some user input to generate any number of squares ...

```
ArrayList<Integer> listOfSquares = new ArrayList();

Scanner getUserNumber = new Scanner(System.in);
System.out.println("How many squares should I find: ");
int numberOfSquares = getUserNumber.nextInt();

for(int i=1 ; i<=numberOfSquares ; i++)
    listOfSquares.add(i*i);

for(int element : listOfSquares)
    System.out.print(element+", ");
```

enhanced for-loop to print elements!

Nov 1-2:23 PM

Every Method Used Returns Something ...

Method	Returns
listName.add(x)	true
listName.add(#, x)	true
listName.remove(#)	Item that was removed
listName.get(#)	Item that it got
listName.indexOf(x)	Index integer number
listName.size( )	Integer size of list
listName.set(#,x)	Item that was replaced

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Things to be completing ...

- Unit 3 WS01-04 Should be done.
- Unit 3 WS05 Should be getting wrapped up.
- Unit 3 WS06 Assigned Today!
- Next class day will be work, review, code time.
- Exam coming up!!!

Oct 31-4:35 PM