**AP Computer Science - Object Assignments**

**MyInteger Assignment** - 10 Points

Create a MyInteger object which does the following:

Datafield (only one)

value (integer) - stores the integer value of the MyInteger object.

Methods

*isEven, isOdd, isPrime* - returns a boolean true/false (instance methods)

*isEven*(int), *isOdd*(int), *isPrime*(int) - returns a boolean true/false for provided integer (static method)

*equals*(int) - compares the MyInteger object to provided integer value, returns true/false

The MyIntegerRunner is found on the weebly.

**MyPoint Assignment** - 15 Points

Create a MyPoint Object which does the following:

Datafields

x (integer) - stores the X value of the MyPoint object.

y (integer) - stores the Y value of the MyPoint object.

Methods

outputPoint - Return a String that contains this object's coordinates in the form (X, Y)

outputQuadrant - Outputs which quadrant that point resides in. Use the outputPoint method as part of this output. Syntax: *The point (3, -2) is found in quadrant 4.*

|  |  |
| --- | --- |
| 2 | 1 |
| 3 | 4 |

distance ()- outputs the double value distance of this point from the origin (0,0)

Syntax: *The point (7, 11)'s distance from the origin is 13.038404810405298*

distance(MyPoint) - outputs the double value distance of the MyPoint object and the one sent into it.

Syntax: *(-4, 3)'s distance from (-8, -3) is 7.211102550927978*

The MyPointRunner is found on the weebly.