

# AP Computer Science

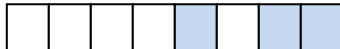


Mr Hanley

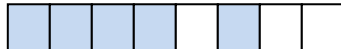


## Assignment 11/1011<sub>2</sub>/13<sub>8</sub>/B<sub>16</sub>

Binary



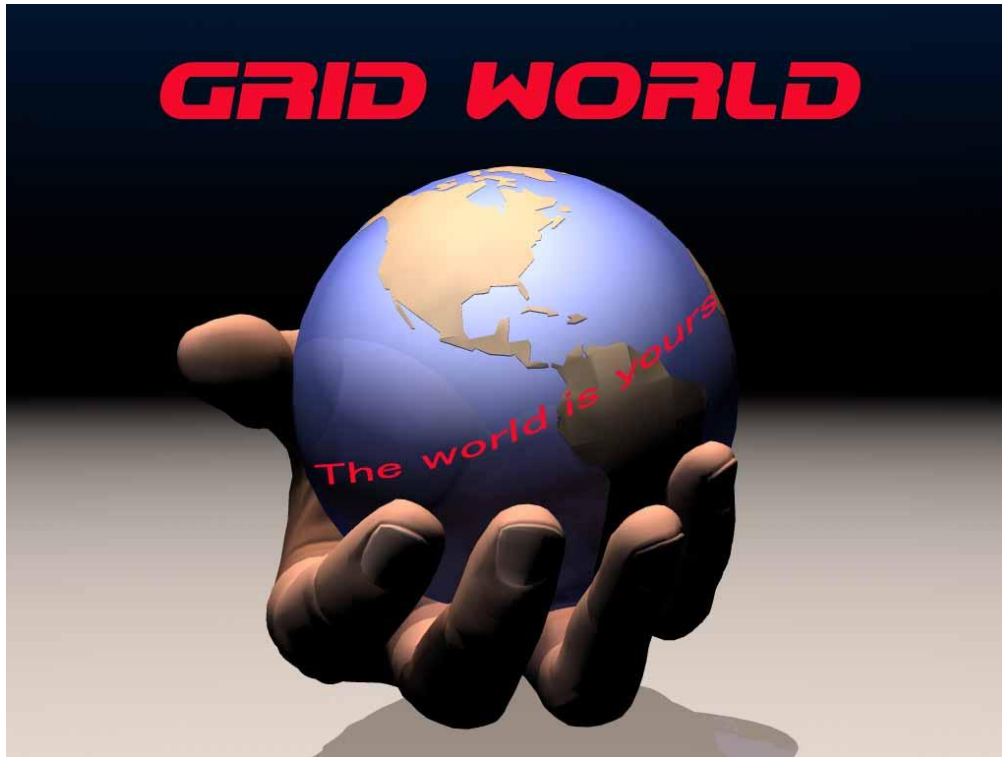
Ones Comp



Twos Comp



## Understanding Grid World



What you are about to read is top secret. Only the highest levels of federal employees have been notified about this potential threat!! TheCIA has recently discovered a java program from a previously unknown group known as the Covenant. SHHHH! Don't let this out!

They appear to have been modeling grids in an attempt to plant bugs and flowers in order to distract us from their real mission, hitherto unknown. President Obama contacted my personally after hearing about a fantastic group of young programmers from CP (Clifton Park).

\* Dynamic Memory \* Big O Notation \* Stacks \* Extreme Programming \* Selection Sort \* Insertion Sort \* Waterfall Model

String \* Arrays \* ArrayList \* Client Server \* Artificial Intelligence \* Inheritance \* Files \* Video Games \* Short circuit evaluation \*

You are to explore the code as described in the briefing below. Good luck, the fate of the nation is in your hands.

Read pages 1-5 of the case study and set up the software on your computer. (See Hanley’s demo for instructions)

- ❖ Answer the question set on page 6 in a word processor document.

Read pages 6-10 and experiment with the case study. TYPED

- ❖ Answer the question set on page 11 TYPED
- ❖ Do the programming exercises on pages 12-13, #1-5 TYPED

<b>Project Name</b>	GridWorld Basic
<b>Class 1 Name</b>	Circle Bug
<b>Class 2 Name</b>	CircleBugRunner
<b>Class 3 Name</b>	Spiral Bug
<b>Class 4 Name</b>	Spiral BugRunner
<b>Class 5 Name</b>	ZBug
<b>Class 6 Name</b>	ZBugRunner
<b>Class 7 Name</b>	DancingBug
<b>Class 8 Name</b>	DancingBugRunner

<b>Rubric</b>	
<b>? Set #1 Page 6</b>	<b>20</b>
<b>? Set #2 Page 11</b>	<b>20</b>
<b>Circle Bug</b>	<b>15</b>
<b>Spiral Bug</b>	<b>15</b>
<b>ZBug</b>	<b>15</b>
<b>Dancing Bug</b>	<b>35</b>
<b>Steps to add another box bug (word processor typed)</b>	<b>10</b>
<b>TOTAL</b>	<b>130</b>