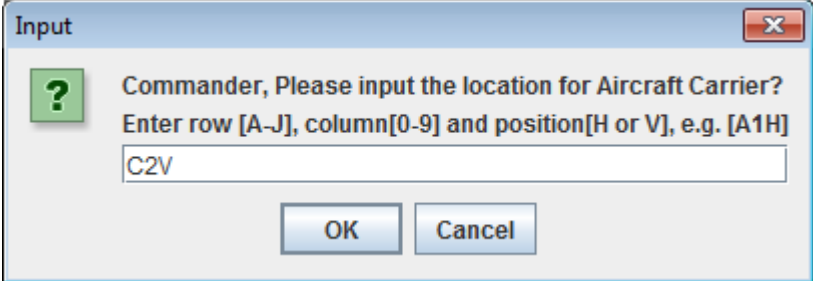
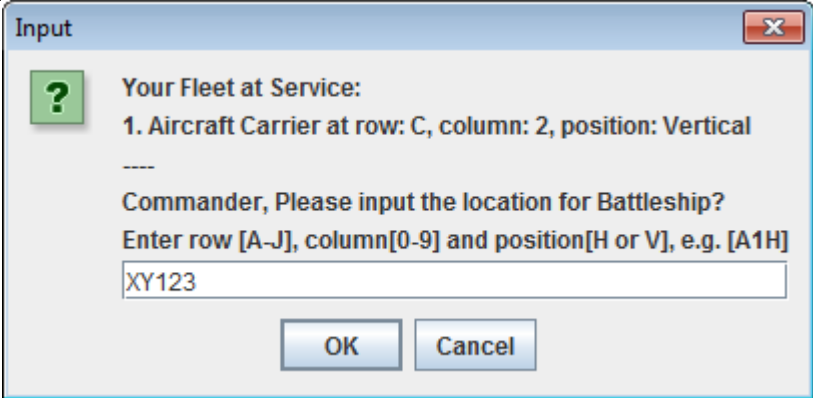
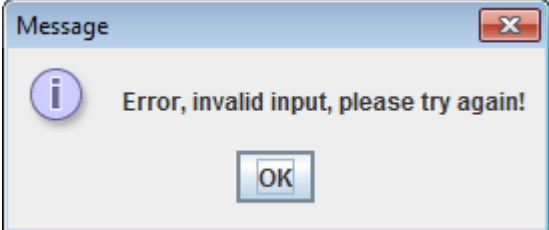
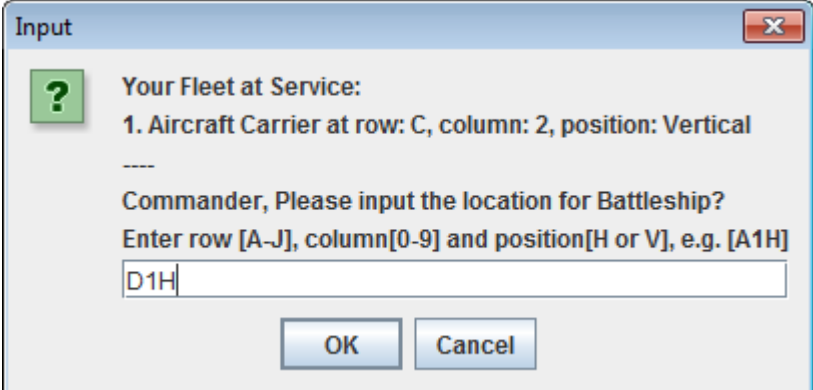
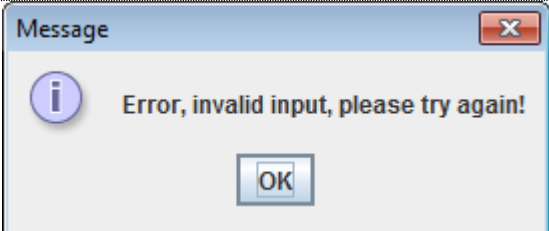
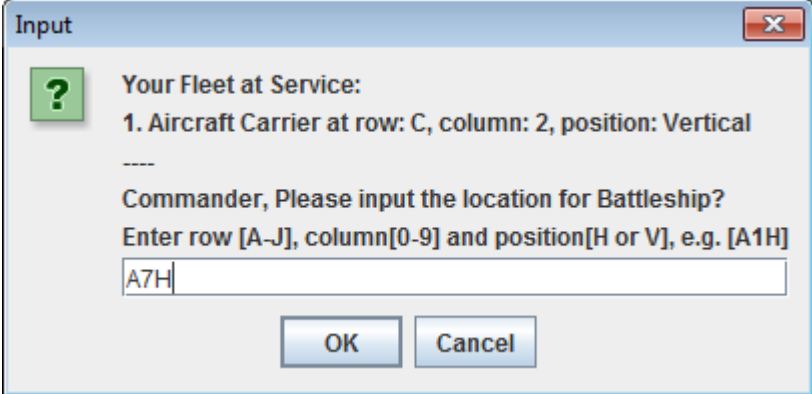
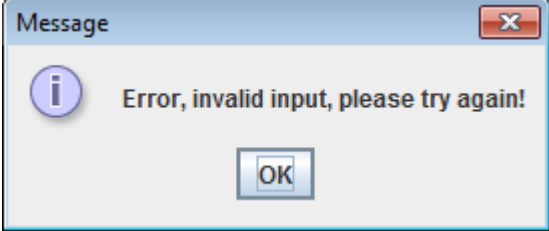
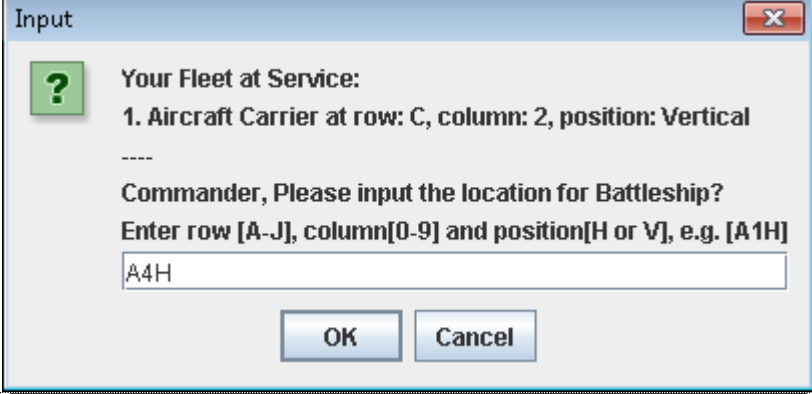
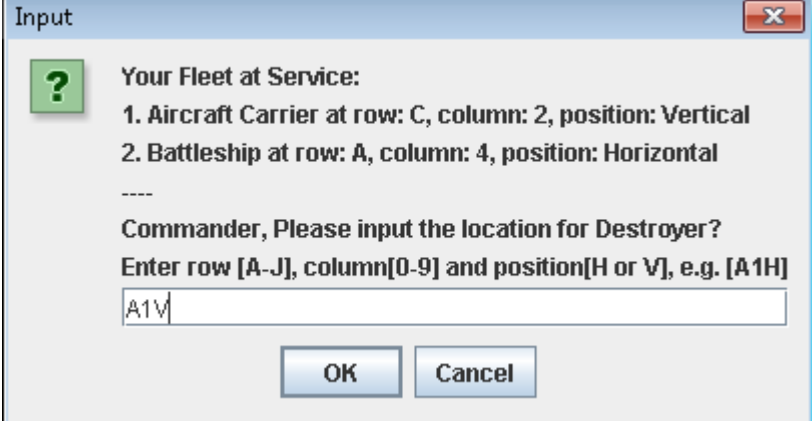
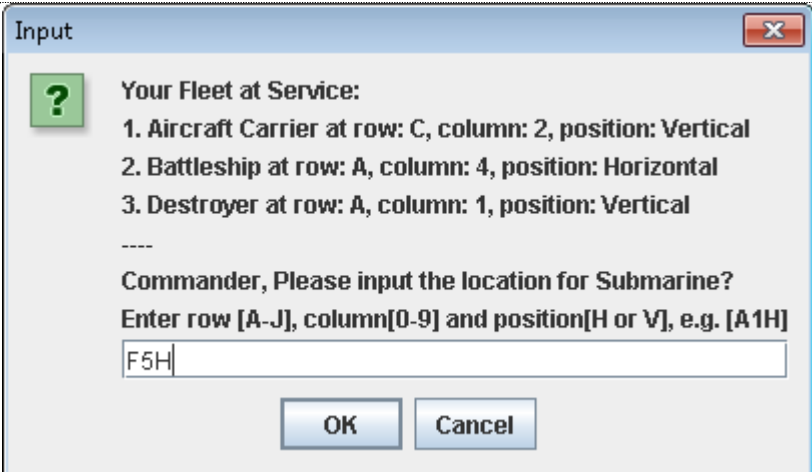
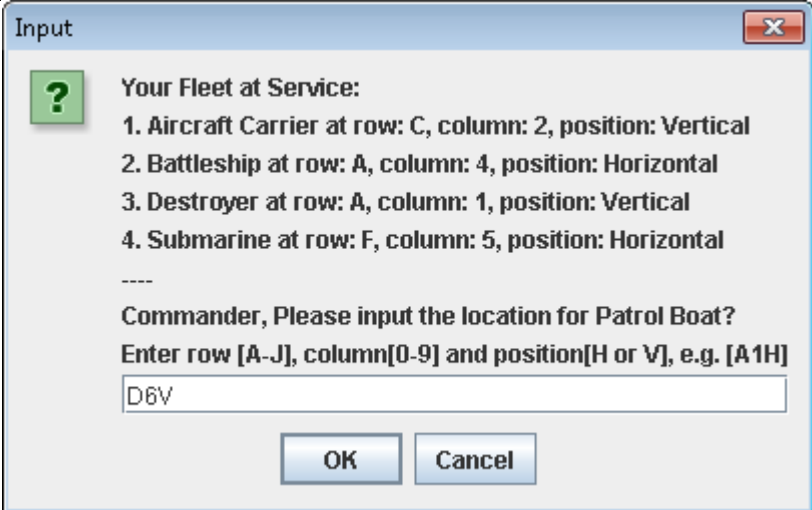
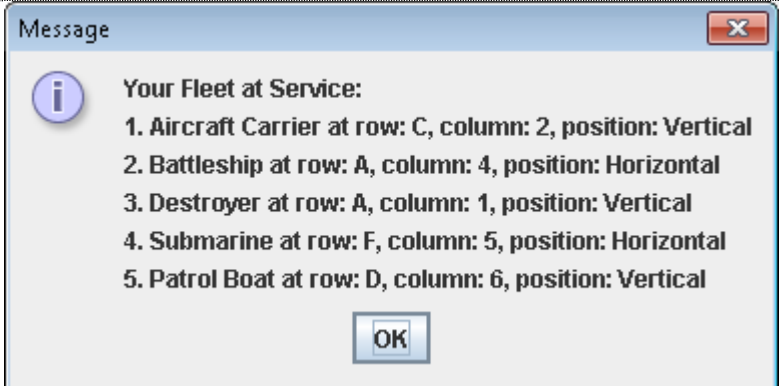


## Sample Program Run (Set 1)

The following shows a sample run of the program. The **bold blue** text is user input. Please take note that your program output must be exactly the same as the sample program runs (i.e., same text, same symbols, same letter case, same number of spaces, etc.). Otherwise, it will be considered as wrong, even if you have computed the correct result.

 An 'Input' dialog box with a green question mark icon. The text reads: 'Commander, Please input the location for Aircraft Carrier? Enter row [A-J], column[0-9] and position[H or V], e.g. [A1H]'. The input field contains 'C2V'. There are 'OK' and 'Cancel' buttons at the bottom.	Type <b>C2V</b> and then click <b>OK</b> .
 An 'Input' dialog box with a green question mark icon. The text reads: 'Your Fleet at Service: 1. Aircraft Carrier at row: C, column: 2, position: Vertical ---- Commander, Please input the location for Battleship? Enter row [A-J], column[0-9] and position[H or V], e.g. [A1H]'. The input field contains 'XY123'. There are 'OK' and 'Cancel' buttons at the bottom.	Type <b>XY123</b> and then click <b>OK</b> . ( <b>note</b> : not a valid coordinate)
 A 'Message' dialog box with an information icon. The text reads: 'Error, invalid input, please try again!'. There is an 'OK' button at the bottom.	Click <b>OK</b> .
 An 'Input' dialog box with a green question mark icon. The text reads: 'Your Fleet at Service: 1. Aircraft Carrier at row: C, column: 2, position: Vertical ---- Commander, Please input the location for Battleship? Enter row [A-J], column[0-9] and position[H or V], e.g. [A1H]'. The input field contains 'D1H'. There are 'OK' and 'Cancel' buttons at the bottom.	Type <b>D1H</b> and then click <b>OK</b> . ( <b>note</b> : overlapped with another ship)

	Click <b>OK</b> .
	Type <b>A7H</b> and then click <b>OK</b> . ( <b>note</b> : exceeded the boundary)
	Click <b>OK</b> .
	Type <b>A4H</b> and then click <b>OK</b> .
	Type <b>A1V</b> and Click <b>OK</b> .

	Type <b>F5H</b> and then click <b>OK</b> .
	Type <b>D6V</b> and then click <b>OK</b> .
	Click <b>OK</b>

Input

Shots Left: 30

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	.	.	.	.	.
D	.	.	.	.	.	.	.	.	.	.
E	.	.	.	.	.	.	.	.	.	.
F	.	.	.	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

XYZ

OK Cancel

Type **XYZ** and then click **OK**.

Message

Error, invalid input, please try again!

OK

Click **OK**.

Input

Shots Left: 30

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	.	.	.	.	.
D	.	.	.	.	.	.	.	.	.	.
E	.	.	.	.	.	.	.	.	.	.
F	.	.	.	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

C5

OK Cancel

Type **C5** and then click **OK**.

Input

Shots Left: 29

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	O	.	.	.	.
D	.	.	.	.	.	.	.	.	.	.
E	.	.	.	.	.	.	.	.	.	.
F	.	.	.	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

D2

OK Cancel

Type **D2** and then click **OK**.

Input

Shots Left: 28

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	.	.	.	.	.	.	.	.
F	.	.	.	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

E2

OK Cancel

Type **E2** and then click **OK**.

Input

Shots Left: 27

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	.	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

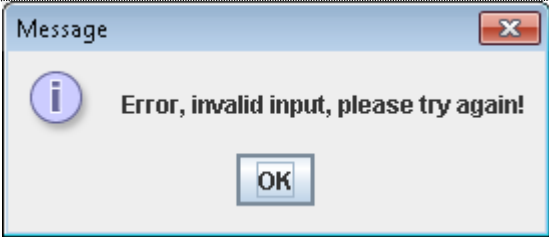
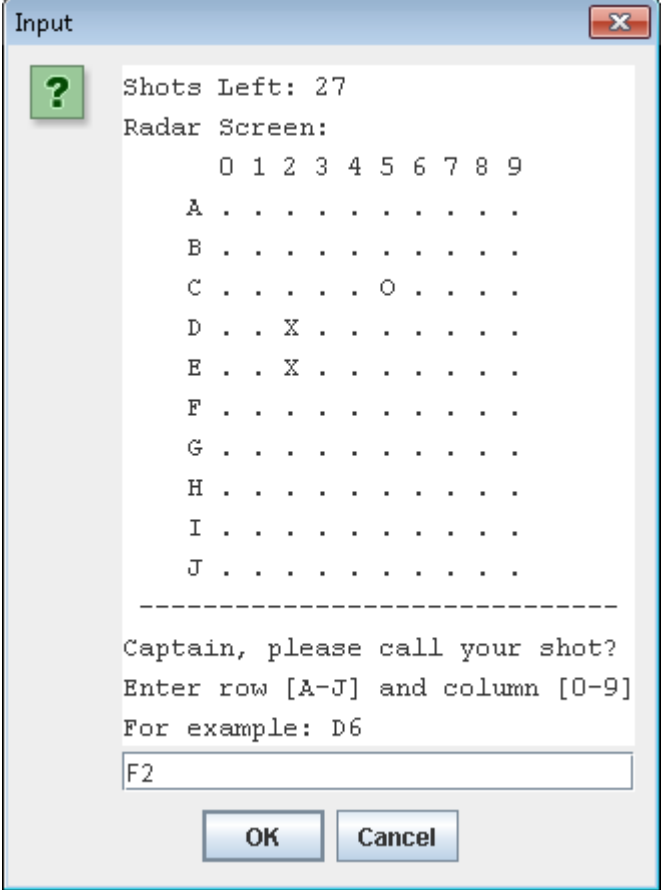
-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

E2

OK Cancel

Type **E2** and then click **OK**. (note: E2 has already been shut)

 <p>A small message dialog box with a blue title bar labeled "Message". It contains an information icon (i) and the text "Error, invalid input, please try again!". There is an "OK" button at the bottom.</p>	<p>Click <b>OK</b>.</p>
 <p>An "Input" dialog box with a blue title bar. It features a green question mark icon. The text inside reads: "Shots Left: 27", "Radar Screen:", followed by a 10x10 grid. The grid has columns 0-9 and rows A-J. 'O' is at C6, 'X' is at D3 and E3. Below the grid is a dashed line and the text: "Captain, please call your shot? Enter row [A-J] and column [0-9] For example: D6". An input field contains "F2". There are "OK" and "Cancel" buttons at the bottom.</p>	<p>Type <b>F2</b> and then click <b>OK</b>.</p>

Input

Shots Left: 26

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	.	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

G2

OK Cancel

Type **G2** and then click **OK**.

Input

Shots Left: 25

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	.	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	.	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

H2

OK Cancel

Type **H2** and then click **OK**.



Input

?

Shots Left: 24  
Radar Screen:  
0 1 2 3 4 5 6 7 8 9  
A . . . . .  
B . . . . .  
C . . . . . O . . . . .  
D . . X . . . . .  
E . . X . . . . .  
F . . X . . . . .  
G . . X . . . . .  
H . . O . . . . .  
I . . . . .  
J . . . . .  
-----  
Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6  


OK

Cancel

Type **C2** and then click **OK**.

Message

i

Aircraft Carrier Sunk!

OK

Click **OK**.

Input

Shots Left: 23

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	.	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

A5

OK Cancel

Type **A5** and then click **OK**.

Input

Shots Left: 22

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	.	X	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

A4

OK Cancel

Type **A4** and then click **OK**.

Input

Shots Left: 21

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	.	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
 Enter row [A-J] and column [0-9]  
 For example: D6

A6

OK Cancel

Type **A6** and then click **OK**.

Input

Shots Left: 20

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	X	.	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	.	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

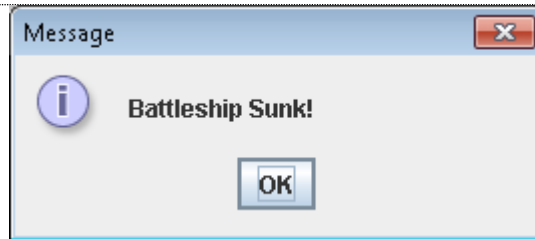
-----

Captain, please call your shot?  
 Enter row [A-J] and column [0-9]  
 For example: D6

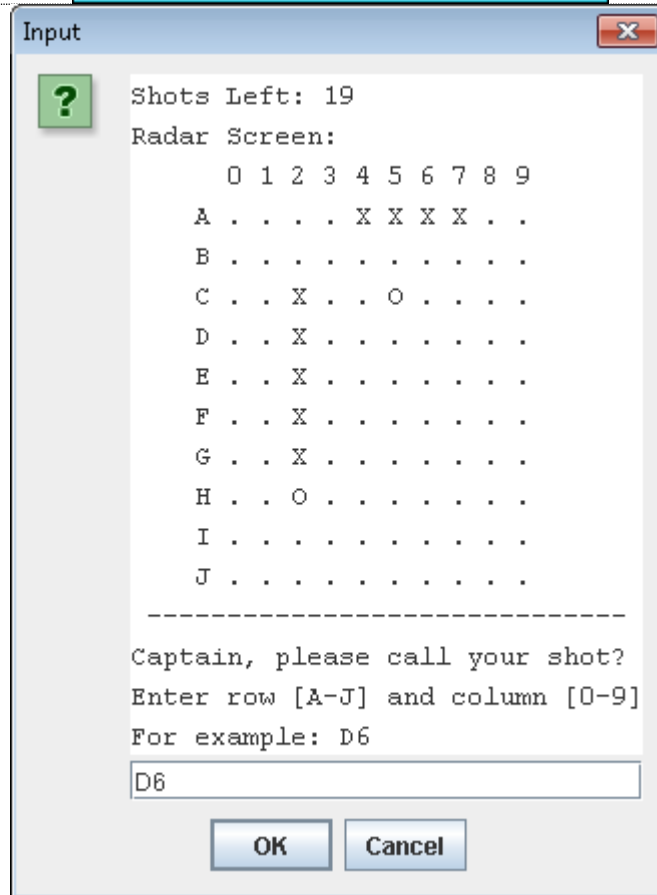
A7

OK Cancel

Type **A7** and then click **OK**.



Click **OK**.



Type **D6** and then click **OK**.

Input

Shots Left: 18

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	X	X	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	.	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

D7

OK Cancel

Type **D7** and then click **OK**.

Input

Shots Left: 17

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	X	X	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	O	.	.
E	.	.	X	.	.	.	.	.	.	.
F	.	.	X	.	.	.	.	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

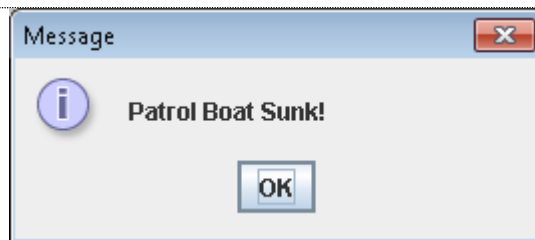
-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

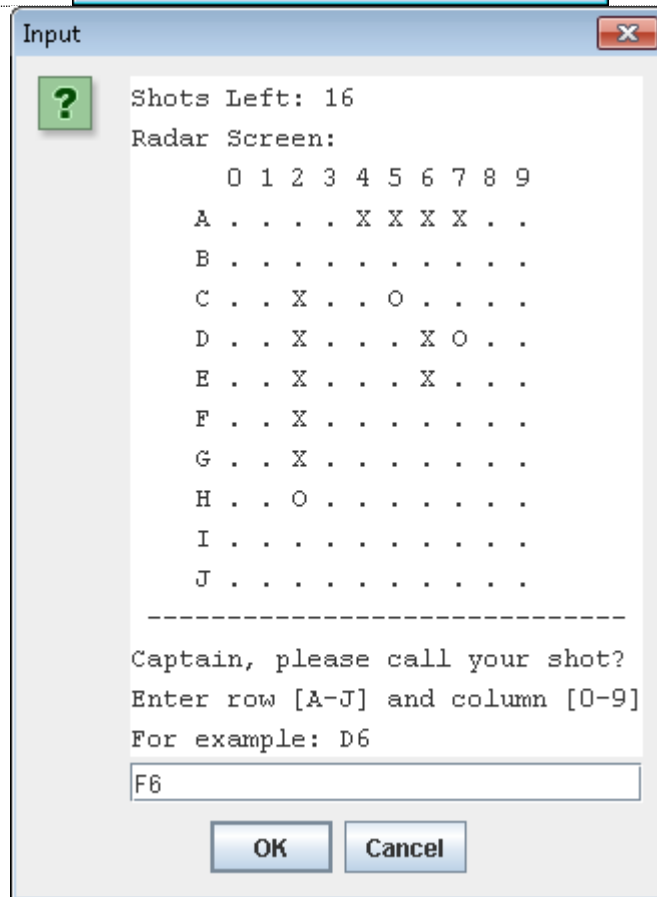
E6

OK Cancel

Type **E6** and then click **OK**.



Click **OK**.



Type **F6** and then click **OK**.

Input

Shots Left: 15

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	X	X	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	O	.	.
E	.	.	X	.	.	.	X	.	.	.
F	.	.	X	.	.	.	X	.	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
 Enter row [A-J] and column [0-9]  
 For example: D6

F7

OK Cancel

Type **F7** and then click **OK**.

Input

Shots Left: 14

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	.	.	.	X	X	X	X	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	O	.	.
E	.	.	X	.	.	.	X	.	.	.
F	.	.	X	.	.	.	X	X	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

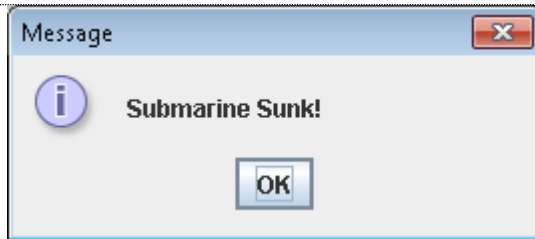
-----

Captain, please call your shot?  
 Enter row [A-J] and column [0-9]  
 For example: D6

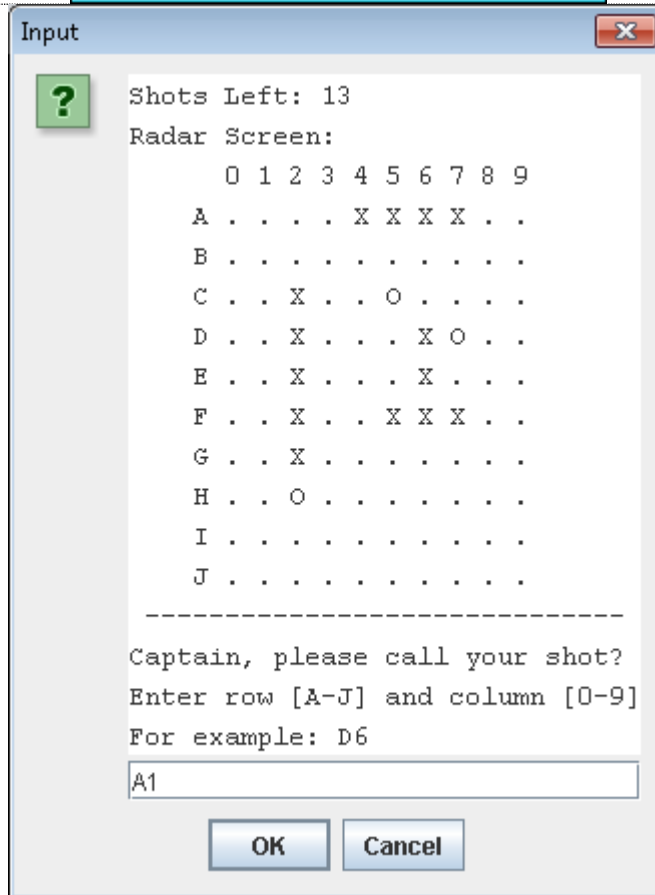
F5

OK Cancel

Type **F5** and then click **OK**.



Click **OK**.



Type **A1** and then click **OK**.



Input

Shots Left: 12

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	X	.	.	X	X	X	X	.	.
B	.	.	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	O	.	.
E	.	.	X	.	.	.	X	.	.	.
F	.	.	X	.	.	X	X	X	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

-----

Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

B1

OK Cancel

Type **B1** and then click **OK**.

Input

Shots Left: 11

Radar Screen:

	0	1	2	3	4	5	6	7	8	9
A	.	X	.	.	X	X	X	X	.	.
B	.	X	.	.	.	.	.	.	.	.
C	.	.	X	.	.	O	.	.	.	.
D	.	.	X	.	.	.	X	O	.	.
E	.	.	X	.	.	.	X	.	.	.
F	.	.	X	.	.	X	X	X	.	.
G	.	.	X	.	.	.	.	.	.	.
H	.	.	O	.	.	.	.	.	.	.
I	.	.	.	.	.	.	.	.	.	.
J	.	.	.	.	.	.	.	.	.	.

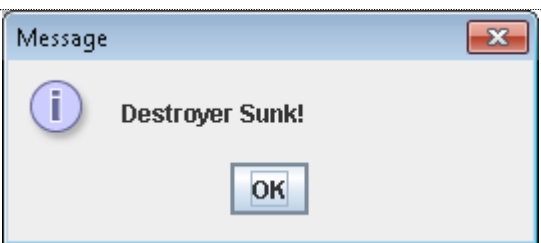
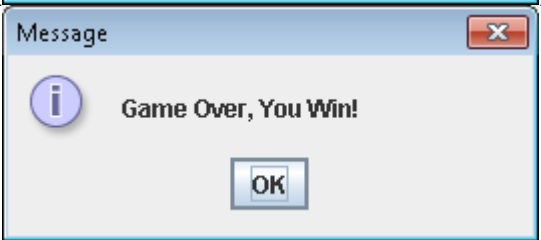
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Captain, please call your shot?  
Enter row [A-J] and column [0-9]  
For example: D6

C1

OK Cancel

Type **C1** and then click **OK**.

		Click <b>OK</b> .
		Click <b>OK</b> and the program terminates.