

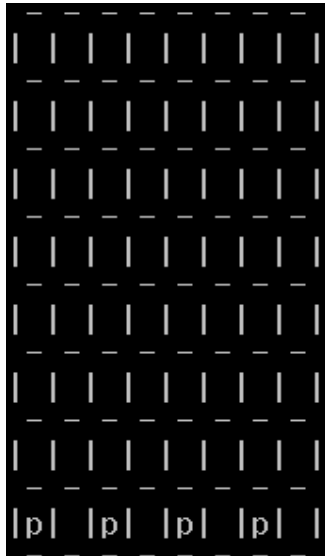
You can find multiple choice review questions in D2L under: **Assessments->Quizzes**

For all questions, unless otherwise specified assume that there are no syntax errors in any programs or program fragments.

Non-multiple choice questions

Short answer 1 (code writing question):

This question refers to a 2D board game. The board consists of an 8x8 list. Each list element contains a playing piece (purple or orange – represented by a character string of length one – see the respective named constants for the exact values for the strings) or is empty (also represented by a named constant). The purple pieces start out at the bottom row of the board:



You can assume that, aside from the function you are to write for this question, the rest of the program is 100% functional and correct. That means you are only to write the code to implement the specific task specified and you will get no marks for implementing other tasks (if this were an actual exam question).

```
SIZE = 8
EMPTY = " "
PURPLE = "p"
ORANGE = "o"
```

```
def initialize():
    # Assume that this function properly initializes an 8x8 list
    # and returns the list to the caller

... #other functions have also been defined
```

```
def start():
    board = initialize()
    purpleNotMoved = True
    ... #other functions called as needed e.g. display(board)
        # The call to the function that you write is here

start()
```

There is only one valid move for a purple piece:

- Directly 'up' one row as well as
- Moving 'left' or 'right' one column.

Write the code for a Boolean function '**purpleMoveValid**'. It must take four parameters (**sRow, sCol, dRow, dCol**). The first pair of parameters is the location of the piece before the move (source) while the second pair is the location where the piece will be moved (destination).

Before calling this function assume the game has already checked if the destination is in bounds (assume this is done in another function) and if the destination is empty (also assume that this is done in another function). That means, in the body of '**purpleMoveValid**' you can assume that the destination will be in bounds and empty. The function you are to write will simply check if the move follows the rules specified for a purple piece (first move or otherwise) and will return true if the move is valid according these rules and false otherwise.