

# Frog Jump

Enter this code. Get it to run. (It won't cut and paste, I made it a picture).

```
public class FrogJump
{
    public static void main (String args[])
    {
        new FrogJump ();

        //set up the board
        char board[] = {'x', 'x', 'x', 'x', '_', 'Y', 'Y', 'Y', 'Y'};

        public boolean valid (int pos1, int pos2)
        { //pos1 is not a frog, bad move
            if (board [pos1] == '_')
                return false;
            //pos2 is not a blank, bad move
            else if (board [pos2] != '_')
                return false;
            //pos1 is within one space of pos2, good move
            else if ((pos1 + 1) == pos2)
                return true;
            else if ((pos2 + 1) == pos1)
                return true;
            //pos1 is within two spaces of pos2, good move
            else if ((pos1 + 2) == pos2)
                return true;
            else if ((pos2 + 2) == pos1)
                return true;
            //everything else is bad
            else
                return false;
        }

        public boolean done ()
        { //check each place has the right thing
            if (board [0] != 'Y')
                return false;
            else if (board [1] != 'Y')
                return false;
            else if (board [2] != 'Y')
                return false;
            else if (board [3] != 'Y')
                return false;
            else if (board [4] != '_')
                return false;
            else if (board [5] != 'x')
                return false;
            else if (board [6] != 'x')
                return false;
            else if (board [7] != 'x')
                return false;
            else if (board [8] != 'x')
                return false;
            else
                return true;
        }
    }
}
```

```

public FrogJump ()
{

    int moves = 0;
    while (!done ())
    { //print board
        System.out.println ("\nYou have taken " + moves + " moves.\n");
        for (int i = 0 ; i < board.length ; i++)
            System.out.print ("[" + i + "]");
        System.out.println ();
        for (int i = 0 ; i < board.length ; i++)
            System.out.print (" " + board [i] + " ");
        //ask for positions
        int pos1 = IO.inputInt ("\n\nFrog Postion: ");
        int pos2 = IO.inputInt ("Position Jumps to: ");
        //move again if wrong
        while (!valid (pos1, pos2))
        {
            System.out.println ("\nError, enter again.");
            pos1 = IO.inputInt ("Frog Postion: ");
            pos2 = IO.inputInt ("Position Jumps to: ");
        }
        //swap
        char temp = board [pos1];
        board [pos1] = board [pos2];
        board [pos2] = temp;
        moves++;
    } //while
} //method
} //class

```

