

# Treasure Hunt

## Purpose

To test the ability to work with a 2 dimensional array.

## Directions

### PART A (Due by end of first lab session)

You have received a treasure map. You need to give the ground team coordinates to start digging.

Create a **minimum** of the following method stub, fill in the `javadoc` block tags, and implement the method's behavior per the method description:

```
/**
 * Prints the row and column of the '+' sign given a 2D character array
 * @param
 */
public static void getCoordinates(char[] [] map){

}
```

In your `main` method, create a 2D character array of the “treasure map”. Each value in the array will be either a plus sign (+) or a minus sign (-). There will be only one plus sign in the array. Pass the 2D array to the `getCoordinates` method and have it print the row & column (“coordinates”) where the + sign was found.

Be prepared to have your program tested with other treasure maps, not just the example one below!

### PART B

Create a **minimum** of the following method stub, fill in the `javadoc` block tags, and implement the method's behavior per the method description:

```
/**
 * Removes the '+' sign from the 2D character array
 * @param
 */
public static void digTreasure(char[] [] map){

}
```

Additionally, modify your `getCoordinates` method to print a message if the '+' can't be found.

In your `main` method, call `digTreasure` and then call `getCoordinates` again to check your error message.

## Examples

Given treasure map:

Plain Text

2D Char Array

```
- - - - -  
- - - - - + - - -  
- - - - -  
- - - - -  
- - - - -  
- - - - -  
- - - - -  
- - - - -  
- - - - -
```

```
{  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '+', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'},  
    {'-', '-', '-', '-', '-', '-', '-', '-', '-', '-', '-'}  
};
```

Program would output:

```
Start digging in row 1, column 6  
Digging treasure in row 1, column 6...  
The treasure is gone!
```