

Function place_on_board():

```
loc = get_location()  
num = get_num(loc)
```

```
If check_row(board, loc[0], num) and check_column(board, loc[1], num) and check_square(board, loc[0], loc[1], num):  
    board[loc[0]][loc[1]] = num
```

Function get_location():

```
Good_loc = False  
While Not Good_loc:  
    location = input("> ")  
    If location == "Q":  
        quit_game()  
    Good_loc = True  
    column = convert(location[0])  
    row = int(location[1])- 1
```

```
If check_location1(board, row, column) AND check_location2(board, row, column):
```

```
    Good_loc = True  
    Return [row, column]
```

Function get_num(location):

```
loc = re_convert(location[1]) + (location[0] + 1)  
While True:  
    num = input(f"What is the value at '{loc}': ")  
    If valid_input(num):  
        If num == "S":  
            helper(location[0], location[1])  
        Else:  
            Return int(num)
```

Function helper(board, row, column):

```
valid_numbers = []
```

```
If check_location1(board, row, column):
```

```
    For num from '1' to '9':
```

```
        If check_row(board, row, num) AND check_column(board, column, num) AND check_square(board, row, column, num):  
            valid_numbers.append(num)
```

```
print valid_numbers
```

