Computer Programming (A)
FAST-NU, Lahore, Spring 2018

Marks 5 + 15

Quiz 2

Roll No.	Sec.

Write a recursive function findPath that accepts a 2-dimensional 0/1 matrix only one of whose cells contains 2. This cell containing 2 is called goal. The function needs to figure out whether there is a 'path' from the top left cell (0, 0) to the goal cell or not. A 'path' is a sequence of adjacent cells all of which contain 1. Two cells are adjacent if they are immediately next to each other horizontally, vertically, or diagonally. Moreover, the top left cell always contains 1. If there is no such path, the function should report so.

```
//example usage
if(findPath(A, m, n)){
//A is an mxn 0/1 matrix with one call containing 2
//This is a wrapper on the recursive method
    cout<<"There is a path.";
}
else
    cout<<"There is no path."
```

```
bool findPath(int ** A, int m, int n){//wrapper method



}
```

```
//write recursive findPath here
```