

Prob9. Given a binary 2D array, where each row is sorted. Find the row with the maximum number of 1s.

Solve:

```
#include <stdio.h>
```

```
#define MAX_ROWS 100
```

```
#define MAX_COLS 100
```

```
int rowWithMaxOnes(int arr[MAX_ROWS][MAX_COLS], int n, int m) {
```

```
    int max_row_index = -1;
```

```
    int j = m - 1;
```

```
    for (int i = 0; i < n; i++) {
```

```
        while (j >= 0 && arr[i][j] == 1) {
```

```
            j--; // Move left
```

```
            if (max_ones < (m - j - 1)) {
```

```
                max_ones = m - j - 1;
```

```
                max_row_index = i;
```

```
            }
```

```
        }
```

```
    }
```

```
    return max_row_index;
```

```
}
```

```
int main() {
```

```
    int arr[MAX_ROWS][MAX_COLS] = {
```

```
        {0, 0, 1, 1},
```

```
        {0, 1, 1, 1},
```

```
        {1, 1, 1, 1},
```

```
        {0, 0, 0, 0}
```

```
};  
  
int n = 4;  
  
int m = 4;  
  
int result = rowWithMaxOnes(arr, n, m);  
  
if (result != -1) {  
    printf("Row with the maximum number of 1s is: %d\n", result);  
} else {  
    printf("No rows found.\n");  
}  
  
return 0;  
}
```