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**Code**

#include<stdlib.h>

#include<stdio.h>

#include<conio.h>

/\* Naqi Ahmad Lab 10 Allocating space for arrays

\*/

void main()

{

//Declare Variables and the arrays

int \*arr;

int sizeOfArray;

int\*\* array2;

int rows;

int cols;

int i, j;

int result;

//Ask the user how many characters the is gonna be

printf("Please enter size for 1D Array: ");

scanf("%d", &sizeOfArray);

printf("\n");

//Allocating memory for the array

arr = (int\*)malloc(sizeOfArray \* sizeof(int));

//this reads into the memory of the array

for (i = 0; i < sizeOfArray; i++)

{

printf("Please enter for value %d: ", i + 1);

scanf("%d", (arr + i));

}

printf("\n");

//Outputs the array

for (i = 0; i < sizeOfArray; i++)

{

printf("Value %d in the Array is: %d \n", (i + 1),\*(arr + i));

}

printf("\n");

// this is for the second array 2D

//Ask for number of rows the would like

printf("Please Enter Number of rows for 2D Array: \n");

scanf("%d", &rows);

//Ask for number of columns the would like

printf("Please Enter Number of cols for 2D Array: \n");

scanf("%d", &cols);

////Allocating memory for rows

array2 = (int\*\*)malloc(rows \* sizeof(int\*));

////Allocating memory for columns

for (i = 0; i < rows; i++)

{

array2[i] = (int\*)malloc(cols \* sizeof(int));

}

////this reads into the memory of to multi dimensional array

for (i = 0; i < rows; i++)

{

for (j = 0; j < cols; j++) {

printf("Please Enter value for row %d and column %d: ", i + 1, j + 1);

scanf("%d", (\*(array2 + i) + j));

}

}

//Outputs

for (i = 0; i < rows; i++)

{

for (j = 0; j < cols; j++) {

printf("%d ", \*(\*(array2 + i) + j));

}

printf("\n");

}

getch();

}

