ForNextDay(5)

Stephen Cole

List two “pointer fails” that demonstrate an incorrect use of pointers. For each, explain why it’s a problem.

1. int \*const p = 1;

\*p++;

p = 3; //Fail

Cannot change the value integer value of constant pointer to integer.

1. const int \*p;

p = 1;

\*p++; //Fail

Cannot increment address of a pointer to a constant integer.

scanarray.c

#include<stdio.h>

#include<stdlib.h>

int main(void)

{

int numVals;

int n;

printf("Enter the number of values in your array: ");

scanf("%d", &n);

int a[n];

numVals = scanfIntArray(a, n);

printf("Number of values in array: %d\n", numVals);

return 0;

}

int scanfIntArray(int a[], int n){

int i;

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

int in;

printf("Enter an integer: ");

scanf("%d", &in);

a[i] = in;

}

return n;

}

A screenshot of a cell phone

Description automatically generated

maxmin.c

#include<stdio.h>

int main(void)

{

int a[5] = {1,2,3,4,5};

int n = 5;

int max = 0;

int min = 10;

max\_min(a, n, &max, &min);

printf("Max value: %d, Min value: %d\n", max, min);

return 0;

}

void max\_min(int a[], int n, int \*max, int \*min)

{

int i;

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

{

printf("cur: %d, max: %d, min: %d\n", a[i], \*max, \*min);

if(a[i] > \*max){

\*max = a[i];

}

if(a[i] < \*min){

\*min = a[i];

}

}

}

A screenshot of a cell phone

Description automatically generated