

ForNextDay(5)
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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.

2. `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;
}

```

```

[scole4@gaea lecture6]$ ./test
Enter the number of values in your array: 2
Enter an integer: 1
Enter an integer: 2
Number of values in array: 2
[scole4@gaea lecture6]$ ./test
Enter the number of values in your array: 4
Enter an integer: 1
Enter an integer: 2
Enter an integer: 3
Enter an integer: 4
Number of values in array: 4

```

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];
    }
}

}
```

```
[scole4@gaea lecture6]$ ./test
cur: 1, max: 0, min: 10
cur: 2, max: 1, min: 1
cur: 3, max: 2, min: 1
cur: 4, max: 3, min: 1
cur: 5, max: 4, min: 1
Max value: 5, Min value: 1
```