```c
//1. Program to find largest and smallest element in array
#include <stdio.h>

void main (){
   int arr[10], big, small, i;

   for (i = 0; i < 10; i++) {
       printf("Enter number %d: ", i+1);
       scanf("%d", &arr[i]);
   }

   big = arr[0];
   small = arr[0];

   for (i = 0; i < 5; i++){
       if (arr[i] > big) big = arr[i];
       if (arr[i] < small) small = arr[i];
   }

   printf("\nLargest element = %d\n", big);
   printf("Smallest element = %d\n", small);
}
```

```
bhargav@bhargav:~/Documents/Studies/C$ gcc compare-array.c -o compare-array
bhargav@bhargav:~/Documents/Studies/C$ ./compare-array
Enter number 1: 1
Enter number 2: 0
Enter number 3: -9
Enter number 4: 14
Enter number 5: 6

Largest element = 14
Smallest element = -9
```

```c
//2. Program to find even, odd, positive and negative elements in an array
#include <stdio.h>

void main(){

   int pos, neg, even, odd, i;
   int arr[5];
   pos = 0;
   neg = 0;
   even = 0;
   odd = 0;

   for (i = 0; i < 5; i++) {
       printf("Enter number %d: ", i+1);
       scanf("%d", &arr[i]);

       if (arr[i] >= 0) pos++;
       else neg++;

       if (arr[i] % 2 == 0) even++;
       else odd++;
   }
   printf("\nEven Count = %d", even);
   printf("\nOdd Count = %d", odd);
   printf("\nPositive Count = %d", pos);
   printf("\nNegative Count = %d\n", neg);
}
```

```
bhargav@bhargav:~/Documents/Studies/C$ gcc array.c -o array
bhargav@bhargav:~/Documents/Studies/C$ ./array
Enter number 1: 5
Enter number 2: 4
Enter number 3: -1
Enter number 4: 3
Enter number 5: 0

Even Count = 2
Odd Count = 3
Positive Count = 4
Negative Count = 1
```

```c
//3. Program to print array in reverse and copy it to another array
#include <stdio.h>

void main (){
   int a[3], b[3], i, j=2;

   for (i = 0; i < 3; i++) {
       printf("Enter number %d: ", i+1);
       scanf("%d", &a[i]);
       b[j--] = a[i];
   }

   printf("\nArray in reverse :\n");

   for (i = 0; i < 3; i++) printf("%d\n", b[i]);
}
```

```
bhargav@bhargav:~/Documents/Studies/C$ gcc array-rev.c -o array-rev
bhargav@bhargav:~/Documents/Studies/C$ ./array-rev
Enter number 1: 10
Enter number 2: 20
Enter number 3: 30

Array in reverse :
30
20
10
```