

Computer Science I

CMPE/CSCI 1370 - 01

For this particular loop, how many times is C performed?

```
    // A    // B    // C
for (int i = 0; i < 10; i++) {
    cout << i; // D
}
```

A. 0

B. 1

C. 9

D. 10

E. 11

Before the loop exits, what is the last section that's performed?

```
    // A    // B    // C  
for (int i = 0; i < 10; i++) {  
    cout << i; // D  
}
```

A. A

B. B

C. C

D. D

Collections

What are examples of collections in real life?

Arrays

- A. declare an array
- B. initialize an array
- C. access an element of an array (indexing operation)

```
//A           // B
int arr[5] = {10, 20, 30, 40, 50};

cout << arr[0]; // C
cout << arr[1];
cout << arr[2];
cout << arr[3];
cout << arr[4];
```

```
//A      // B
int arr[5] = {10, 20, 30, 40, 50};

cout << arr[0]; // C
cout << arr[1];
cout << arr[2];
cout << arr[3];
cout << arr[4];
```

- Declaration: what does the number between the braces stand for?
- How many elements does this array have?
- Indexing: what is the range of indexes for this array?
- What do you think happens when you access an array element outside this range?

For the below array declaration, which of the following statements correctly references the value 'e'?

```
char arr[5] = {'a', 'b', 'c', 'd', 'e'};
```

- A. `arr[5]`
- B. `arr[4];`
- C. `arr[3];`
- D. `arr[e];`
- E. `arr['e']`

Iterating (traversing) through an array

```
for (int i = 0; i < 5; i++) {  
    cout << arr[i];  
}
```


Array as parameter

```
void show_array(int arr[], int length) {  
    for (int i = 0; i < length; i++) {  
        cout << arr[i];  
    }  
}  
  
int main () {  
    int arr[5] = {10, 20, 30, 40, 50};  
    show_array(arr, 5);  
  
    return 0;  
}
```

In-class exercises!

Attendance!

<http://bit.ly/1370-1rollcall>