# Computer Science I

**CMPE/CSCI 1370 - 01**

# Project demo: word search

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## What do we need to solve this?

1. How do we represent the puzzle? (Collections)

2. How do we repeat an action multiple times? (Iteration)

   - Search for each word in the dictionary

   - Compare each character in the word to the puzzle

# Decode a secret

# `while` loop

1. evaluates the conditional expression

- if true, goes to 2

- if false, exit the loop and performs the next line after the closing brace

2. evaluates the body of the loop

3. back to 1

# Local variables

- "declared" in the function body, not in the parameter list

- "initialized" in the function body, not passed as an argument during function call

# All the operators

- `=` Assignment (note, different from equality comparison `==` )

- `++` Increment, `--` Decrement

- `+=` Compound assignment

## while

```
int i = 0;
while (i < 10) {
   cout << i;
   i++;
}
```

## for

```
for (int i = 0; i < 10; i++) {
   cout << i;
}
```

In which order are these sections performed?

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

A. ABCD

B. ABDC

C. ACBD

D. ADBC

E. BDCA

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

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

A. 0

B. 1

C. 9

D. 10

E. 11

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?

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

A. A

B. B

C. C

D. D

# In-class exercises!

# Attendance!

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