1. initialization, looping condition, after each cycle (increasing/decreasing condition after each loop, such as: decrease by 1, increase by 1, or multiply by 2

2. Count up

**For**

Looping condition (ends/false after 20)

{

int start = 0;

int end = 20;

cout << "COUNTING UP!" << endl;

After each cycle

(adds 1 each loop)

for (int i = start; i <= end; i++)

{

cout << i << " ";

Initialization (starts at 0)

}

}

**While**

{

Initialization (starts at 0)

cout << "Counting Up! " << endl;

int i = 0;

while (i <= 20)

{

Looping condition (ends/false after 20)

cout << " " << i;

i++;

}

}

After each cycle

(adds 1 each loop)

3. Multiply Up

**For**

Initialization (starts at 1)

{

Looping condition (ends/false after 128)

int start = 1;

int end = 128;

cout << "COUNTING UP!" << endl;

for (int i = start; i <= end; i \*= 2)

{

After each cycle

(multiplies times 2 after each loop)

cout << i << " ";

}

}

**While**

{

Initialization (starts at 1)

cout << "Counting Up! " << endl;

int i = 1;

while (i <= 128)

{

Looping condition (ends/false after 128)

cout << " " << i;

i = i \* 2;

}

}

After each cycle

(multiplies times 2 after each loop)