

`for` **Loop**

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

Example - for Loop

sum: 0

```
int sum = 0;  
  
for (int i = 1; i <= 3; ++i)  
    sum += i;  
  
std::cout << sum << "\n";
```

Example - for Loop

```
int sum = 0;  
  
for (int i = 1; i <= 3; ++i)  
    sum += i;  
  
std::cout << sum << "\n";
```

sum:	0
i:	1

Example - for Loop

sum:	0
i:	1

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

Example - for Loop

```
int sum = 0;
```

```
for (int i = 1; i <= 3; ++i)  
    sum += i;
```

```
std::cout << sum << "\n";
```

1 <= 3

true

sum:	0
i:	1

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	1
i:	1

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	1
i:	2

Example - for Loop

```
int sum = 0;  
  
for (int i = 1; i <= 3; ++i)  
    sum += i;  
  
std::cout << sum << "\n";
```

sum:	1
i:	2

Example - for Loop

```
int sum = 0;
```

```
for (int i = 1; i <= 3; ++i)  
    sum += i;
```

```
std::cout << sum << "\n";
```

2 <= 3

true

sum:	1
i:	2

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	3
i:	2

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	3
i:	3

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	3
i:	3

Example - for Loop

```
int sum = 0;
```

```
for (int i = 1; i <= 3; ++i)  
    sum += i;
```

```
std::cout << sum << "\n";
```

3 <= 3

true

sum:	3
i:	3

Example - for Loop

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

sum:	6
i:	3

Example - for Loop

```
int sum = 0;  
  
for (int i = 1; i <= 3; ++i)  
    sum += i;  
  
std::cout << sum << "\n";
```

sum:	6
i:	4

Example - for Loop

```
int sum = 0;  
  
for (int i = 1; i <= 3; ++i)  
    sum += i;  
  
std::cout << sum << "\n";
```

sum:	6
i:	4

Example - for Loop

```
int sum = 0;
```

```
for (int i = 1; i <= 3; ++i)  
    sum += i;
```

```
std::cout << sum << "\n";
```

4 <= 3

false

sum:	6
i:	4

Example - for Loop

sum: 6

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```

Example - for Loop

Note:

i is gone

sum: 6

```
int sum = 0;

for (int i = 1; i <= 3; ++i)
    sum += i;

std::cout << sum << "\n";
```