

For Loops

```
for ( initialization ; condition ; update ) {
```

```
  code
```

```
}
```

```
for ( int i=0; i<5; ++i ) {
```

```
  code is executed for i = 0, 1, 2, 3, 4 in turn
```

```
}
```

- 1) initialize i , then check condition = true, so execute code
- 2) update i (so now $i=1$), then check condition = true, so execute code
- 3) \vdots
- 4) update i (so now $i=5$), then check condition = false, so exit loop.