

# Teil V

## Java (Implementierung): Kontrollstrukturen

# Java: Bedingte Anweisungen

if

```
1  if (a < b) {  
2      c = a;  
3  } else {  
4      c = b;  
5  }
```

# Java: Bedingte Anweisungen

if

```
1  if (a < b) {  
2      c = a;  
3  } else {  
4      c = b;  
5  }
```

```
1  if ( ! (a >= b) ) {  
2      c = a;  
3  } else {  
4      c = b;  
5  }
```

# Java: Bedingte Anweisungen

## switch

```
1
2  if (a == 1) {
3      c = a;
4
5  } else if (a == 2) {
6      c = 1.0 / a;
7
8  } else if (a == 3) {
9      c = a * a;
10
11 } else {
12     c = 0;
13 }
```

# Java: Bedingte Anweisungen

## switch

```
1
2  if (a == 1) {
3      c = a;
4
5  } else if (a == 2) {
6      c = 1.0 / a;
7
8  } else if (a == 3) {
9      c = a * a;
10
11 } else {
12     c = 0;
13 }
```

```
1  switch (a) {
2      case 1:
3          c = a;
4          break;
5      case 2:
6          c = 1.0 / a;
7          break;
8      case 3:
9          c = a * a;
10         break;
11     default:
12         c = 0;
13 }
```

# Java: Schleifen

for

```
1  int[] werte = new int[7];
2
3  for (int pos = 0;
4      pos < werte.length;
5      ++pos) {
6      System.out.println("werte[" + pos
7                          + "]" =
8                          + werte[pos]
9                          );
10 }
```

# Java: Schleifen

for, vereinfacht

```
1  int[] werte = new int[7];  
2  
3  for (int wert : werte) {  
4      System.out.println("Wert = " + wert);  
5  }
```

# Java: Schleifen

## while

```
1  int[] werte = new int[7];
2
3  int pos = 0;
4  while (pos < werte.length) {
5      System.out.println("werte[" + pos
6                          + "] ="
7                          + werte[pos]
8                          );
9      ++pos;
10 }
```





# Java

## continue

```
1  for (int i = 0; i < 10; ++i) {  
2      if (i % 2 == 0) {  
3          continue;  
4      }  
5      System.out.println( i );  
6  }
```

# Java

## continue

```
1  for (int i = 0; i < 10; ++i) {
2      if (i % 2 == 0) {
3          continue;
4      }
5      System.out.println( i );
6  }
```

## break

```
1  int[] werte = new int[7];
2
3  for (int pos = 0; pos < werte.length; ++
4      pos) {
5      werte[pos] = 10 - pos;
6  }
7
8  int pos;
9  for (pos = 0; pos < werte.length; ++pos) {
10     if (werte[pos] == 5) {
11         break;
12     }
13 }
14
15 if (pos < werte.length) {
16     System.out.println( "werte[" + pos
17                         + "]" = "
18                         + werte[pos]
19 );
20 }
```