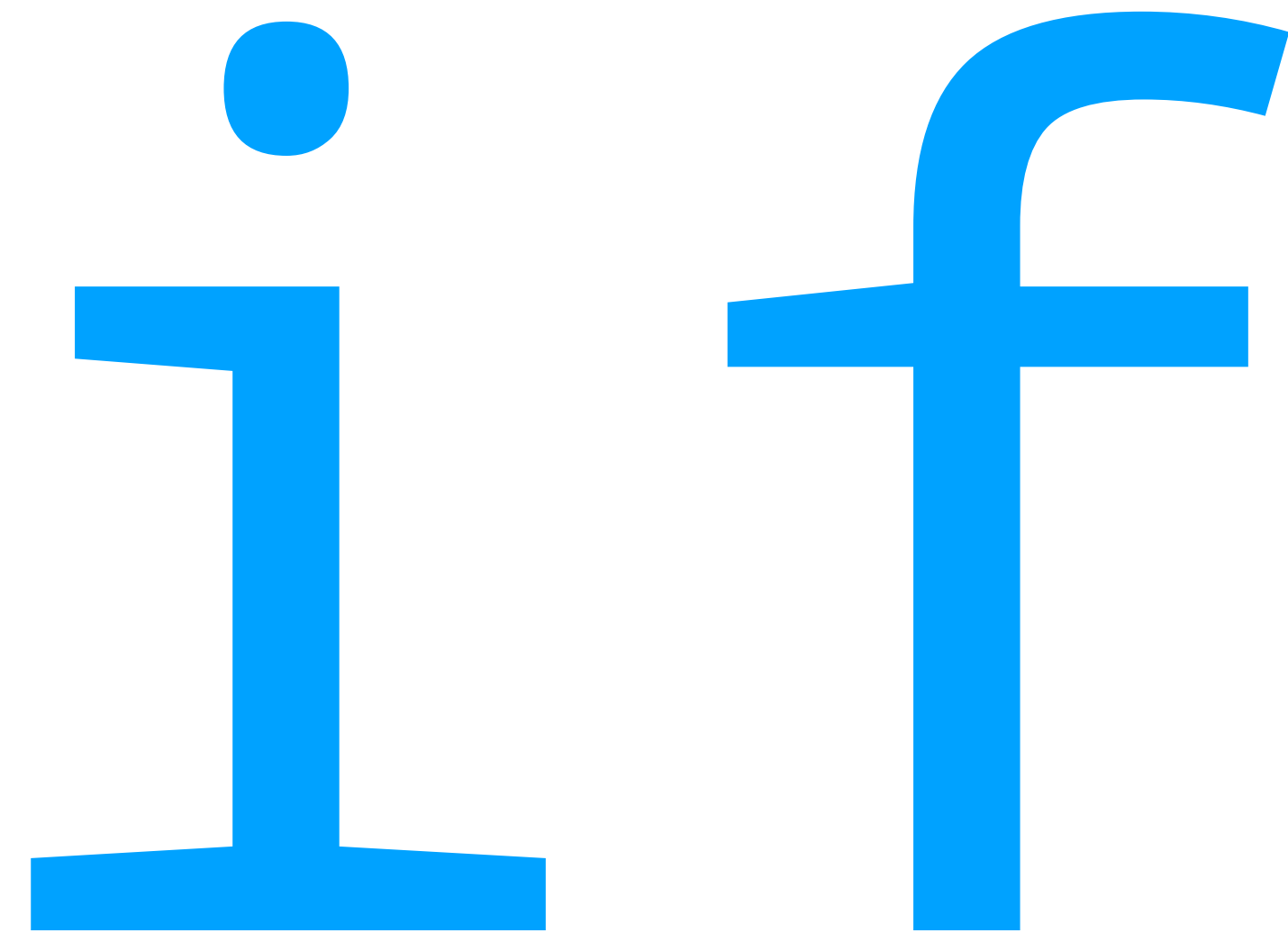Essential Computing 1
Conditionals

if

If

```
if( true ){
    // then execute code here
}
```

If

```
if( false ){
  // don't execute code here
}
```

If else

```
if( false ){
  // don't execute code here
} else {
  // instead, execute code here
}
```

If else

```
if( true ){
    // execute code here
} else {
    // don't execute code here.
}
```

Else if chaining

```java
double value = Math.random();
if( value < 0.33 ){
  // Code
} else if( value < 0.66 ) {
  // Code
} else {
  // Code
}
```

If else nesting

Does same as previous example

```
double value = Math.random();
if( value < 0.33 ){
  // Code
} else {
 } if( value < 0.66 ) {
  // Code
 } else {
  // Code
 }
}
```

single line statements don't need **curly bracket**

```
double value = Math.random();
if( value < 0.33 ){
  doA();
} else {
  doB();
}
```

```
double value = Math.random();
if( value < 0.33 ) doA();
else doB();
```

single line statements don't need **curly bracket**

```java
double value = Math.random();
if( value < 0.33 ){
  doA();
} else if( value < 0.66){
  doB();
} else {
  doC();
}
```

```java
double value = Math.random();
if( value < 0.33 ) doA();
else if( value < 0.66) doB();
else doC();
```

there is no limit to **if else** chaining

```
double value = Math.random();
if( value < 0.33 ){
  doA();
} else if( value < 0.66){
  doB();
} else if( value < 0.95){
  doC();
} else {
  doD();
}
```

```
double value = Math.random();
if( value < 0.33 ) doA();
else if( value < 0.66) doB();
else if( value < 0.95) doC();
else doD();
```