

# Assignment

# Assignment

```
int age;
```

# Assignment

Not so exciting is it?

How about using the variable to store an integer?

# Assignment

```
int age;
```

```
age = 12;
```

# Assignment

```
int age;
```

```
age = 12;
```

.... now age has the value 12

# Assignment

```
int age;
```

```
age = 17;
```

What is the value of age?

# Assignment

```
int age;  
age = 17;  
age = 13;
```

What is the value of age?

# Assignment =

Many languages uses = for assignment

So read = as “is assigned” \*

\*) in swedish **tilldelas**



# Assignment

It's your turn. Read the following sentence.

```
age = 17;
```

# Assignment

It's your turn. Read the following sentence.

age = 17;

... yes, “age is assigned 17”\*

\*) age tilldelas 17 in Swedish

# Assignment - a bit of theory

“an assignment statement sets and/or re-sets the value stored in the storage location(s) denoted by a variable name; in other words, it copies the value into the variable.”

[https://en.wikipedia.org/wiki/Assignment\\_\(computer\\_science\)](https://en.wikipedia.org/wiki/Assignment_(computer_science))

# Assignment

Will this work?

```
int age;  
age = "Liverpool";
```

# Assignment

Will this work?

```
int age;  
age = "Liverpool";
```

Answer is no, since "Liverpool" is not an integer. Good thing we have types isn't it? A human would think "nr 1" .. but that's another story.

# Assignment

When assigning, the right hand side of the “=” sign is calculated/evaluated.

```
age = 1;
```

1 is kind of easy to calculate. What if the right hand side is more complex? Check out: operator and expression.

# Assignment

The number of students in a class is the sum of the male students and the female students.

Yes, we're assuming we only have male and female. It is easier in this example. Hope you're ok with that.

# Assignment

```
int nrMales;
```

```
int nrFemales;
```

```
int nrStudents;
```

```
nrMales = 13;
```

```
nrFemales = 15;
```

```
nrStudents = nrFemales + nrMales;
```



# Assignment of ...

```
nrStudents = nrFemales + nrMales;
```

Does this work?

Yes, the right hand side (called an expression) is calculated before the assignment.

More on expressions later on. Think of this as a cliff hanger.

# Assignment

```
nrStudents = nrFemales + nrMales;
```

think:

```
nrStudents = 15 + 13;
```

```
nrStudents = 28;
```

Cool, isn't it?

# Declaration and Assignment

```
int nrMales;  
nrMales = 13;
```

Two lines .... argggggg. Too much work. Quicker way?

# Declaration and Assignment

```
int nrMales = 13;
```

Declaration and assignment done on the same line