Anonymous Functions

Anonymous Functions

Anonymous Functions (λ functions) are expressions that represent a function without a name.

```
fun x -> x + 1

(fun x -> x + 1) 5
👉 6
```

```
fun args -> output
```

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```
fun x -> x + 1


(fun x -> x + 1) 5
👉 6
```

Function with name:

```
let double x = 2 * x;;
double 3;;   👉 6
List.map double [1; 2; 3];; 👉 [2; 4; 6]
```

Anonymous Functions

Anonymous Function:

```
List.map (fun x -> 2 * x) [1; 2; 3] 👉 [2; 4; 6]
```

Anonymous Functions are usually used when they are short and only used once.

They are also useful for performing program transformations.

Anonymous Functions

Multiple parameters:

```
fun x y -> x + y
```

which means:

```
fun x -> (fun y -> x + y)
```

In OCaml functions are **curried** by default.