

C2110 *UNIX and programming*

Lesson 8

PS / 2020 Distance form of teaching: Rev2

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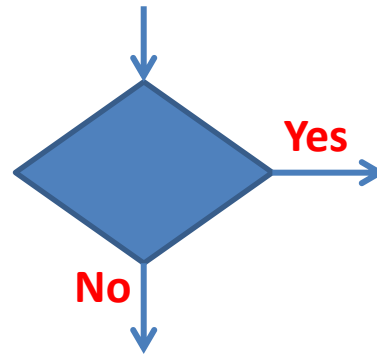
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Summary L7

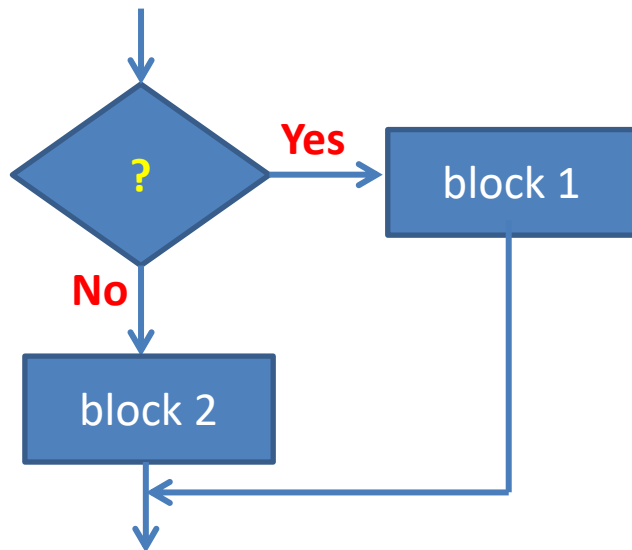
➤ Bash

Decision Block

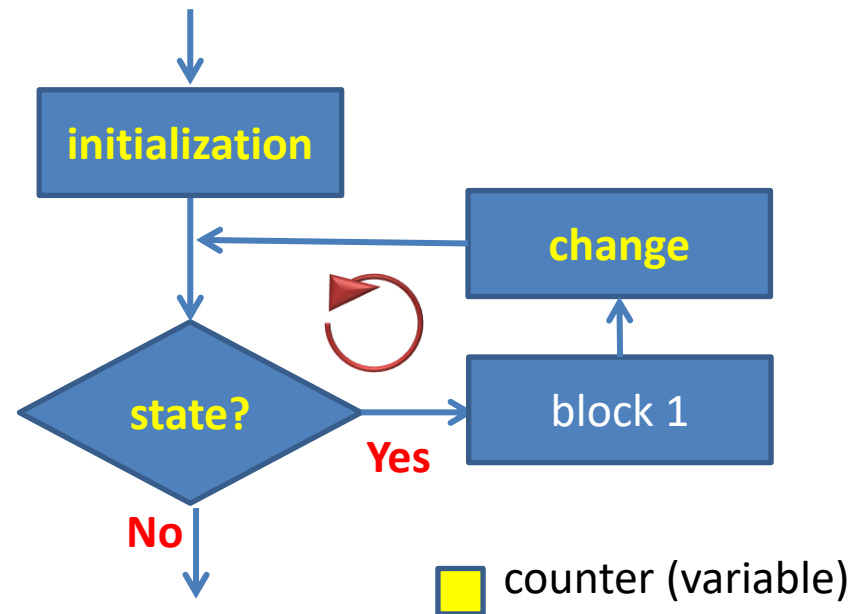
Typical use of decision block



Conditional block execution (conditions)



Cyclic block execution (loops)



Conditions

```
if command1; then
    command2
    ...
else
    command3
    ...
fi
```

It is possible to test the return value of a command or the result of a logical expression.

```
if ! mkdir directory 2> /dev/null; then
    echo "I cannot create directory!"
    exit 1
fi
```

Boolean expressions:

```
[[ number1 operator number2 ]]
[[ operator string1 ]]
```

More complex logical expressions:

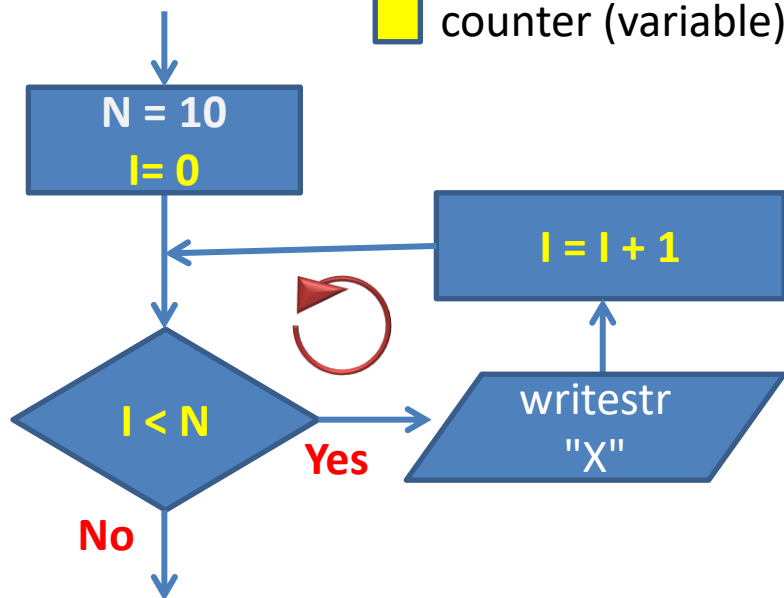
```
||    logical or
&&   logical and
!     negation
```

Example:

```
[[ (I -ge 5) && (I -le 10) ]]
```

Loop using while

■ counter (variable)



```
N=10
I=0
while [[ I -lt N ]]; do
    echo "X"
    ((I = I + 1))
done
```

```
while command1; do
    command2
    ...
done
```

While loop is used mainly in situations where changing the "counter" is a complex matter or cannot be controlled by a quantifiable counter (it depends, for example, on the result of a command).

Next Subject

➤ **Bash**

Content

➤ Loop

- for vs while

➤ Troubleshooting

- syntactic and logical errors, syntax highlighting, static analysis, debugging

➤ Functions

➤ Lollipop Competition