

Shell Programming Constructs

Operators

- Arithmetic : +, -, *, /, %
- Relational : -eq, -ne, -lt, -gt, -le, -ge
- Logical : -a, -o, !

if ... else

```
if [ condition ]
then
    ...
fi

if [ condition ]
then
    ...
else
    ...
fi

if [ condition ]
then
    ...
elif [ condition ]
then
    ...
else
    ...
fi
```

case

```
case $var in
  1|5|jan)
    ;;
  2|feb)
    ;;
  *)
    ;;
esac
```

Loops

```
Initialisation
while [ condition ]
do
    Body
    Modification
done

Initialisation
until [ condition ]
do
    Body
    Modification
done

for var in collection
do
    ...
done
```

file conditionals

- -e \$path : True if path is exists
- -f \$file : True if file is regular file
- -d \$file : True if file is directory file
- -x \$file : True if file is executable
- -r \$file : True if file is readable
- -w \$file : True if file is writable