

# While Loop

- While loop works just like the for loop, except that it executes the loop as long as the condition is true.
- Execute a command or a set of commands multiple times but you are not sure how many times.
- Execute a command or a set of commands until a specific condition occurs
- Create infinite loops
- Menu driven programs

## Examples of while loop

```
mission_name=$1


mkdir $mission_name

rocket-add $mission_name

rocket-start-power $mission_name
rocket-internal-power $mission_name
rocket-start-sequence $mission_name
rocket-start-engine $mission_name
rocket-lift-off $mission_name
rocket_status=rocket-status $mission_name

while [ $rocket_status = "launching" ]
do
    sleep 2
    rocket_status=rocket-status $mission_name
done

if [ $rocket_status = "failed" ]
then
    rocket-debug $mission_name
fi
```




The screenshot shows a terminal window with a dark background. At the top, the title bar reads 'create-and-launch-rocket'. The terminal displays the execution of a script with the following commands and their outputs:

```
mission_name=$1
mkdir $mission_name
rocket-add $mission_name
rocket-start-power $mission_name
rocket-internal-power $mission_name
rocket-start-sequence $mission_name
rocket-start-engine $mission_name
rocket-lift-off $mission_name
rocket_status=rocket-status $mission_name
while [ $rocket_status = "launching" ]
do
    sleep 2
    rocket_status=rocket-status $mission_name
done
if [ $rocket_status = "failed" ]
then
    rocket-debug $mission_name
fi
```

- Real life use case can be :

## Real life use cases:



```
while true
Do
    echo "1. Shutdown"
    echo "2. Restart"
    echo "3. Exit Menu"
    read -p "Enter your choice: " choice

    if [ $choice -eq 1 ]
    then
        shutdown now
    elif [ $choice -eq 2 ]
    then
        shutdown -r now
    elif [ $choice -eq 3 ]
    then
        break
    else
        continue
    fi
done
```