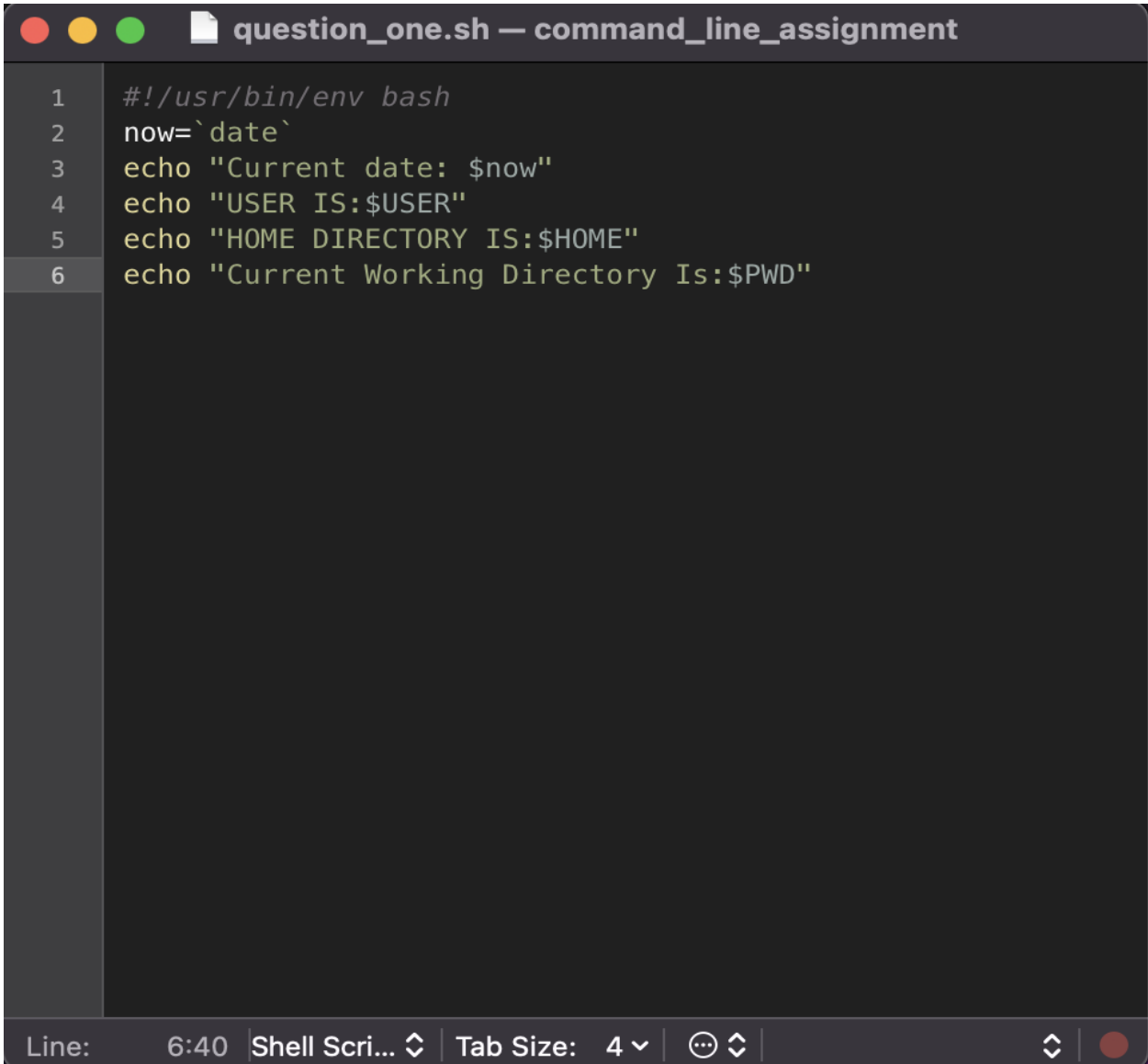


Command Line Assignment

Question 1. Write a bash script to get the current date, time, username, home directory and current working directory.

A screenshot of a code editor window titled "question_one.sh — command_line_assignment". The editor has a dark theme and shows a bash script with six lines of code. Line numbers 1 through 6 are visible on the left. The script content is:

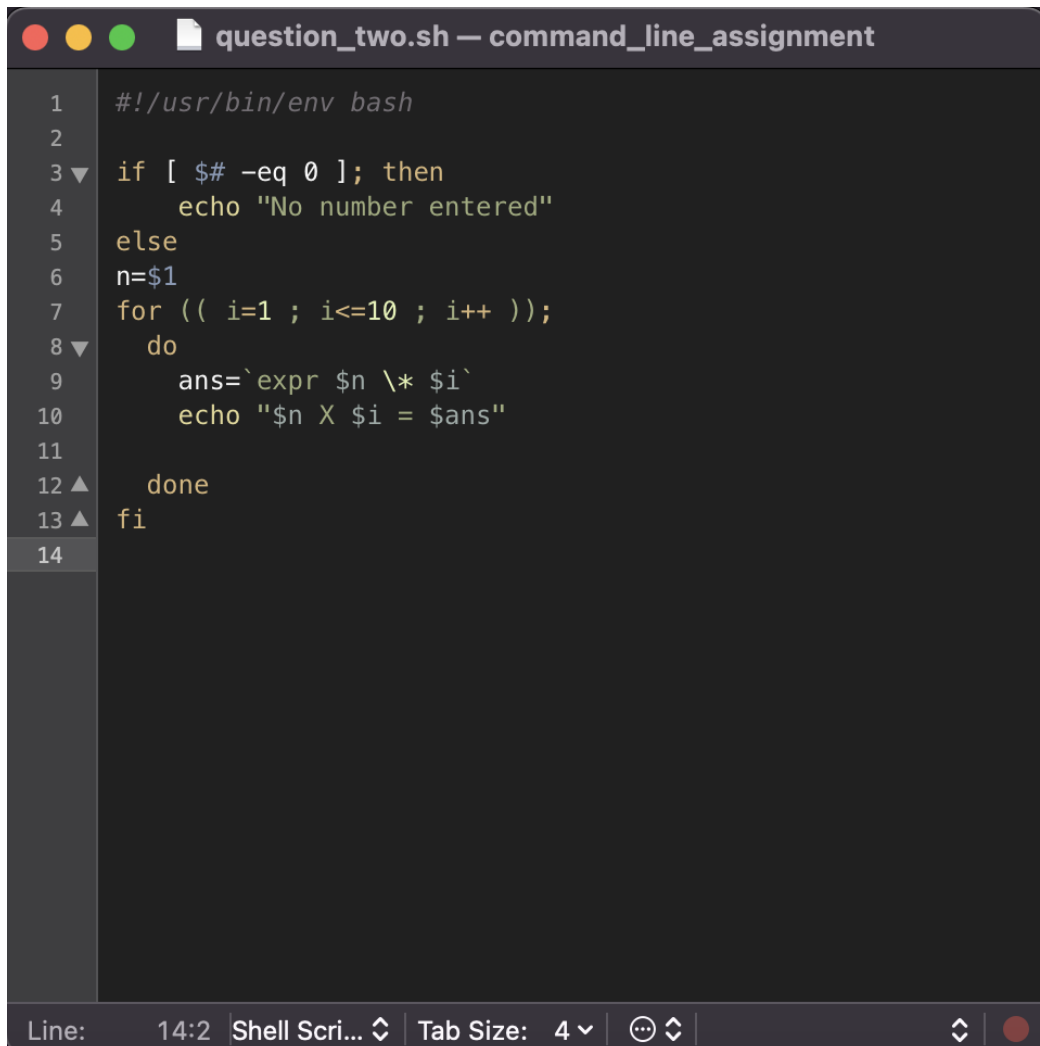
```
1  #!/usr/bin/env bash
2  now=`date`
3  echo "Current date: $now"
4  echo "USER IS:$USER"
5  echo "HOME DIRECTORY IS:$HOME"
6  echo "Current Working Directory Is:$PWD"
```

 The status bar at the bottom shows "Line: 6:40", "Shell Scri...", "Tab Size: 4", and other editor controls.

```
devarithish@Devas-MacBook-Air command_line_assignment % bash question_one.sh
Current date: Thu Feb  2 11:50:49 IST 2023
USER IS:devarithish
HOME DIRECTORY IS:/Users/devarithish
Current Working Directory Is:/Users/devarithish/desktop/command_line_assignment
devarithish@Devas-MacBook-Air command_line_assignment %
```

Question 2. Write a bash script (name Table.sh) to print the Table of a number by using a while loop. It should support the following requirements.

- The script should accept the input from the command line.
- If you don't input any data, then display an error message to execute the script correctly.

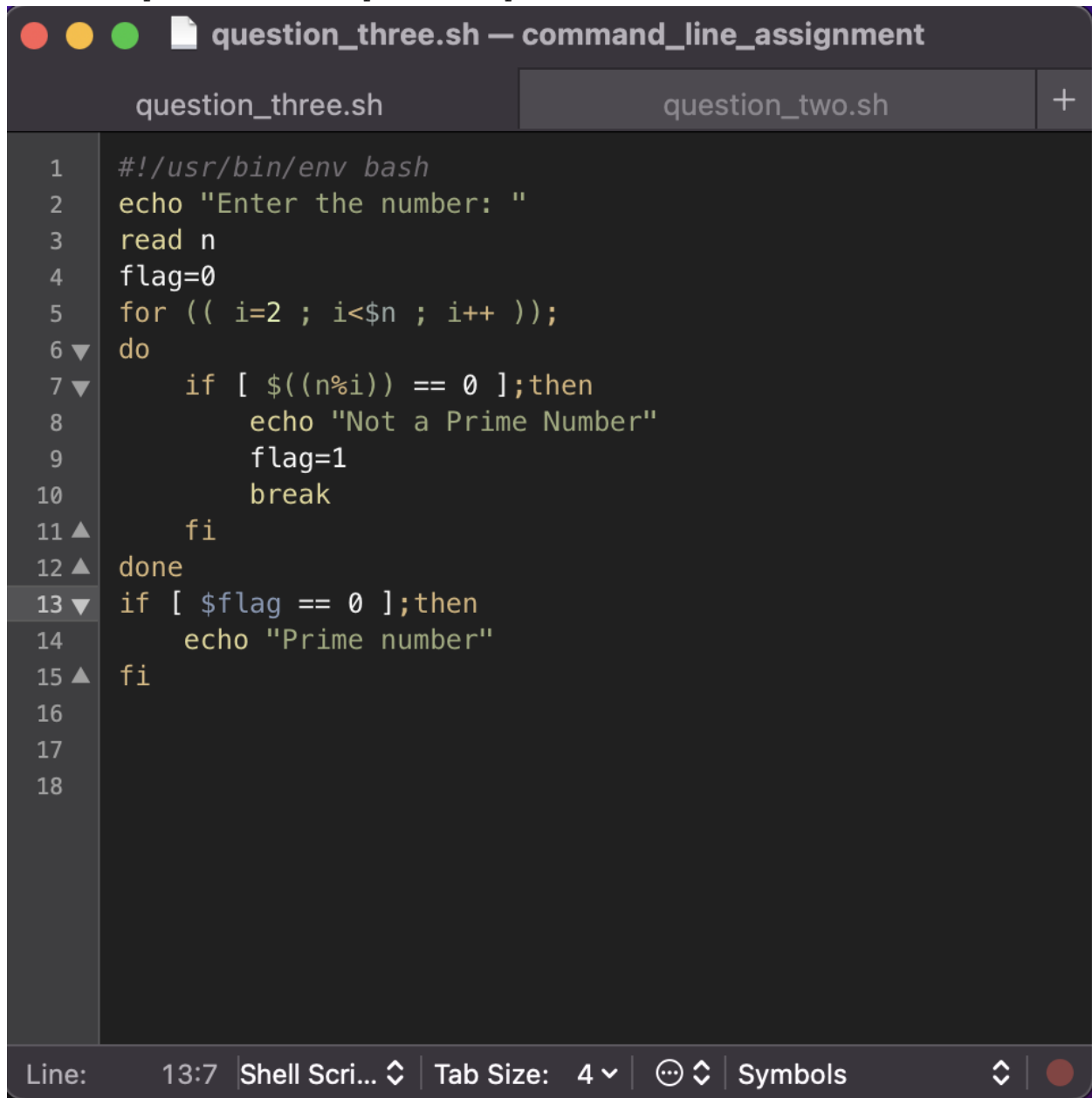


```
1  #!/usr/bin/env bash
2
3  if [ $# -eq 0 ]; then
4      echo "No number entered"
5  else
6      n=$1
7      for (( i=1 ; i<=10 ; i++ ));
8      do
9          ans=`expr $n \* $i`
10         echo "$n X $i = $ans"
11     done
12 done
13 fi
14
```

```
[devarithish@Devas-MacBook-Air command_line_assignment % bash question_two.sh
No number entered
[devarithish@Devas-MacBook-Air command_line_assignment % bash question_two.sh
No number entered
[devarithish@Devas-MacBook-Air command_line_assignment % bash question_two.sh 6
6 X 1 = 6
6 X 2 = 12
6 X 3 = 18
6 X 4 = 24
6 X 5 = 30
6 X 6 = 36
6 X 7 = 42
6 X 8 = 48
6 X 9 = 54
6 X 10 = 60
devarithish@Devas-MacBook-Air command_line_assignment %
```

Question 3. Write a Function in bash script to check if the number is prime or not? It should support the following requirement.

- The script should accept the input from the User.



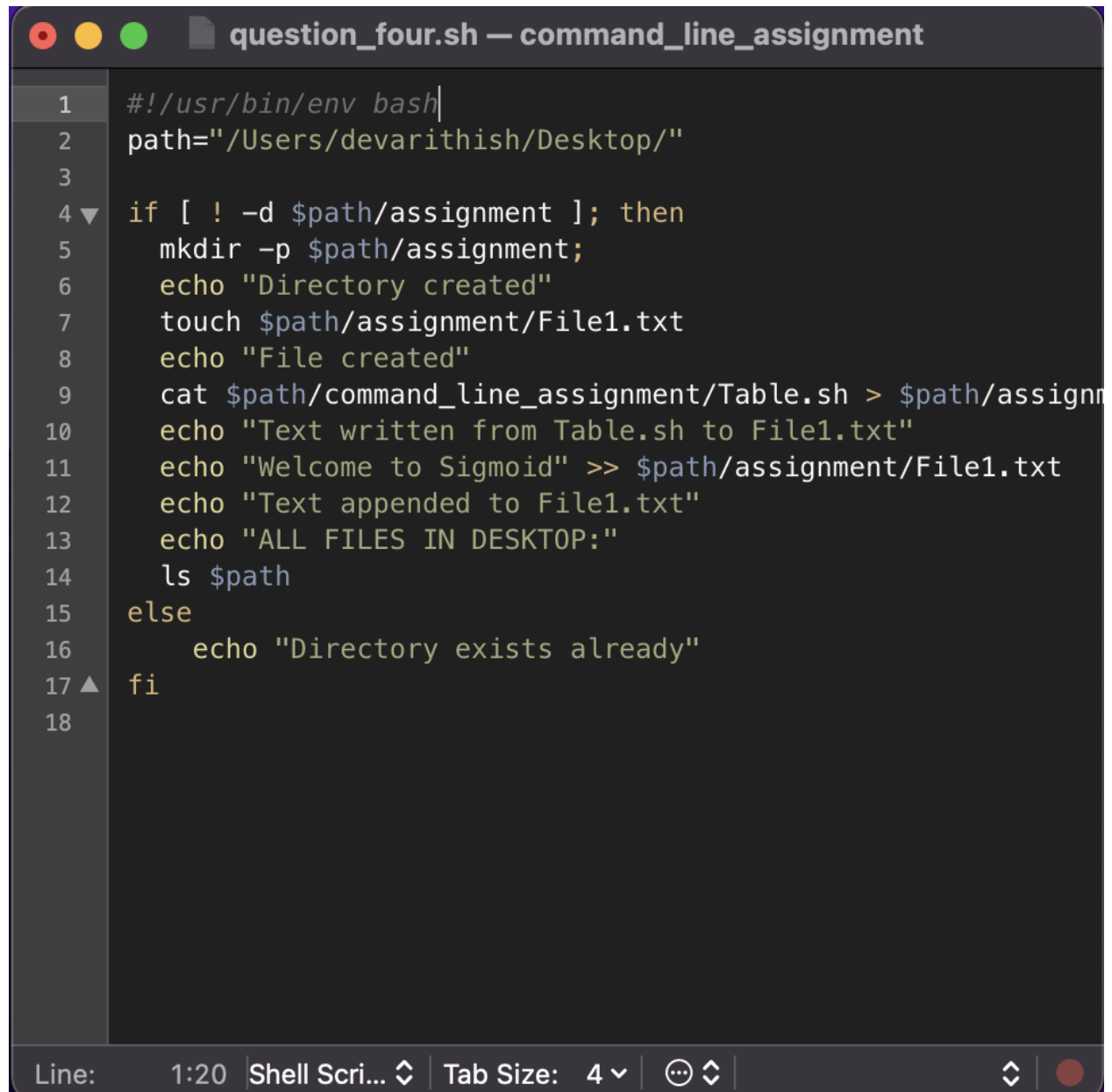
```
1  #!/usr/bin/env bash
2  echo "Enter the number: "
3  read n
4  flag=0
5  for (( i=2 ; i<$n ; i++ ));
6  do
7      if [  $((n\%i)) == 0$  ];then
8          echo "Not a Prime Number"
9          flag=1
10         break
11     fi
12 done
13 if [  $\$flag == 0$  ];then
14     echo "Prime number"
15 fi
16
17
18
```

Line: 13:7 | Shell Scri... | Tab Size: 4 | Symbols

```
devarithish@Devas-MacBook-Air command_line_assignment % bash question_three.sh
Enter the number:
5
Prime number
devarithish@Devas-MacBook-Air command_line_assignment % bash question_three.sh
Enter the number:
6
Not a Prime Number
devarithish@Devas-MacBook-Air command_line_assignment %
```

Question 4. Create a bash script that supports the following requirement.

- Create a folder 'Assignment'.
- Create a file 'File1.txt' inside 'Assignment' Folder.
- Copy all the content of Table.sh(2nd script) in 'File1.txt' without using 'cp' and 'mv' command.
- Append the text 'Welcome to Sigmoid' to the 'File1.txt' file.
- List all the directories and files present inside Desktop Folder.



```
1  #!/usr/bin/env bash
2  path="/Users/devarithish/Desktop/"
3
4  if [ ! -d $path/assignment ]; then
5      mkdir -p $path/assignment;
6      echo "Directory created"
7      touch $path/assignment/File1.txt
8      echo "File created"
9      cat $path/command_line_assignment/Table.sh > $path/assignment/File1.txt
10     echo "Text written from Table.sh to File1.txt"
11     echo "Welcome to Sigmoid" >> $path/assignment/File1.txt
12     echo "Text appended to File1.txt"
13     echo "ALL FILES IN DESKTOP:"
14     ls $path
15 else
16     echo "Directory exists already"
17 fi
18
```

Line: 1:20 | Shell Scri... | Tab Size: 4 | ...

```

devarithish@Devas-MacBook-Air command_line_assignment % bash question_four.sh
Enter the Path
Directory created
File created
Text written from Table.sh to File1.txt
Text appended to File1.txt
ALL FILES IN DESKTOP:
GIT-ASSIGNMENT      Screenshot 2023-01-25 at 3.43.21 PM.png      Screenshot 2023-02-02 at 11.51.47 AM.png      project
PYTHON ASSIGNMENT   Screenshot 2023-01-25 at 3.43.25 PM.png      Screenshot 2023-02-02 at 12.36.00 PM.png      python practice
Screenshot 2023-01-18 at 11.46.01 AM.png      Screenshot 2023-01-25 at 5.34.13 PM.png      assignment
Screenshot 2023-01-19 at 6.15.16 PM.png      Screenshot 2023-01-26 at 1.28.48 AM.png      command_line_assignment
Screenshot 2023-01-19 at 9.38.15 PM.png      Screenshot 2023-01-26 at 1.44.07 AM.png      dem2
Screenshot 2023-01-25 at 3.08.59 PM.png      Screenshot 2023-01-26 at 12.56.58 AM.png      git
devarithish@Devas-MacBook-Air command_line_assignment %

```

```

File1.txt
#!/usr/bin/env bash

if [ $# -eq 0 ]; then
    echo "No number entered"
else
    n=$1
    i=1
    while [ $i -le 10 ]
    do
        ans=`expr $n \* $i`
        echo "$n X $i = $ans"
        i=$((i+1))
    done
fi
Welcome to Sigmoid
|

```

Question 5. You have given an array. Using Bash script, print its length, maximum element and minimum element. arr=(2 3 4 1 6 7).

```
#!/usr/bin/env bash
# method 1
<<COMMENTS
echo "Enter the size of the array:"
read n
if [ $n == 0 ];then
    echo "Empty Array"
fi
myarray=()
echo "Enter the array:"
for (( i=1 ; i<=$n ; i++ ));
do

    read myarray[$i]
done
mi=${myarray[1]}
mx=${myarray[1]}

for i in ${!myarray[@]}; do

    if [ $mi -ge $i ];then
        mi=$i
    fi
    if [ $mx -le $i ];then
        mx=$i
    fi

done
echo "Max element= ${mx} and Min element=${mi}"
COMMENTS
# method 2
myarray=( 2 3 4 1 6 7 )
IFS=$'\n'
echo "Max:"
echo "${myarray[*]}" | sort -nr | head -n1
echo "Min:"
echo "${myarray[*]}" | sort -n | head -n1
```

```
1
[devarithish@Devas-MacBook-Air command_line_assignment % bash question_five.sh
Max:
7
Min:
1
devarithish@Devas-MacBook-Air command_line_assignment %
```