

AUX PROJECT 1: SHELL SCRIPTING

Shell Scripting for the 10 tasks

```
#!/bin/bash
```

Task 1: Ask for name and age

```
read -p "Enter your name: " name
```

```
read -p "Enter your age: " age.
```

Task 2: Create a new directory and navigate into it

```
read -p "Enter a directory name: " dir_name.
```

```
mkdir "$dir_name"
```

```
cd "$dir_name"
```

Task 3: List files sorted by size

```
ls -lS
```

Task 4: Count the number of files

```
file_count=$(ls -l | wc -l)
```

```
echo "Number of files: $file_count"
```

Task 5: Take a list of numbers and calculate the sum

```
read -p "Enter a list of numbers separated by spaces: " numbers.
```

```
sum=0
```

```
for num in $numbers; do
```

```
    sum=$((sum + num))
```

```
done
```

```
echo "Sum of the numbers: $sum"
```

Task 6: Output a random number

```
random_number=$((RANDOM % 100 + 1))
```

```
echo "Random number: $random_number"
```

Task 7: Create a backup of a specified file

```
read -p "Enter the filename to backup: " filename.
```

```
backup_dir="backup"
```

```
mkdir -p "$backup_dir"
```

```
timestamp=$(date +%Y%m%d%H%M%S)
```

```
cp "$filename" "$backup_dir/$filename.$timestamp"
echo "Backup created: $backup_dir/$filename.$timestamp"
```

Task 8: Check if a website is online

```
read -p "Enter a website URL: " url
if curl --output /dev/null --silent --head --fail "$url"; then
    echo "Website is up"
else
    echo "Website is down"
fi
```

Task 9: Convert Celsius to Fahrenheit

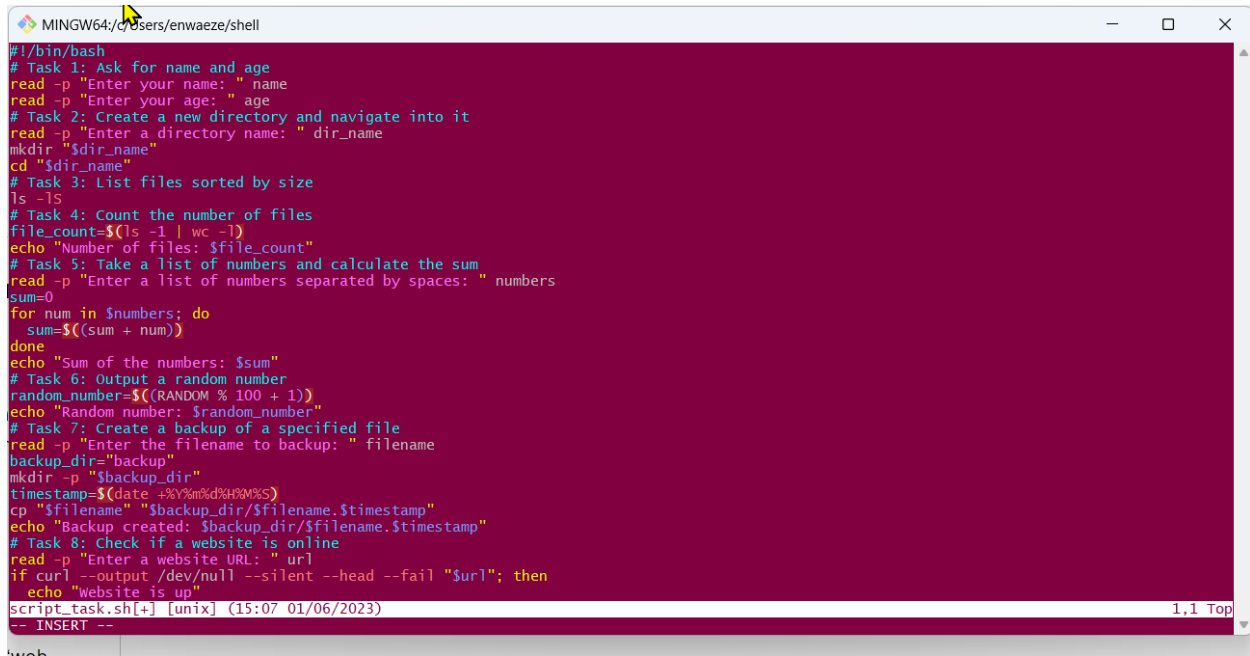
```
read -p "Enter temperature in Celsius: " celsius
fahrenheit=$((echo "scale=2; $celsius * 9 / 5 + 32" | bc))
echo "Temperature in Fahrenheit: $fahrenheit"
```

Task 10: Reverse a sentence

```
read -p "Enter a sentence: " sentence
reversed=""
len=${#sentence}
for (( i=$len-1; i>=0; i-- )); do
    reversed="$reversed${sentence:$i:1}"
done
echo "Reversed sentence: $reversed."
```

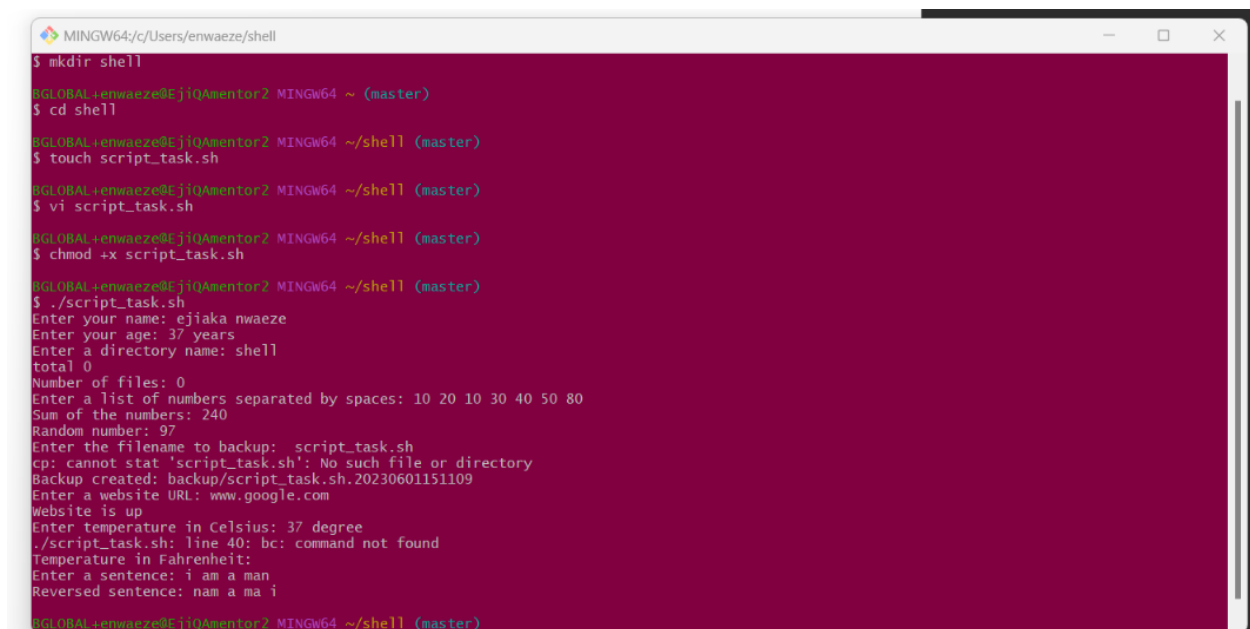
Screen record (images)

Image 1: shell scripting for 10 task in the file.



```
MINGW64/c/Users/enwaeze/shell
#!/bin/bash
# Task 1: Ask for name and age
read -p "Enter your name: " name
read -p "Enter your age: " age
# Task 2: Create a new directory and navigate into it
read -p "Enter a directory name: " dir_name
mkdir "$dir_name"
cd "$dir_name"
# Task 3: List files sorted by size
ls -ls
# Task 4: Count the number of files
file_count=$(ls -l | wc -l)
echo "Number of files: $file_count"
# Task 5: Take a list of numbers and calculate the sum
read -p "Enter a list of numbers separated by spaces: " numbers
sum=0
for num in $numbers; do
    sum=$((sum + num))
done
echo "Sum of the numbers: $sum"
# Task 6: Output a random number
random_number=$((RANDOM % 100 + 1))
echo "Random number: $random_number"
# Task 7: Create a backup of a specified file
read -p "Enter the filename to backup: " filename
backup_dir="backup"
mkdir -p "$backup_dir"
timestamp=$(date +%Y%m%d%H%M%S)
cp "$filename" "$backup_dir/$filename.$timestamp"
echo "Backup created: $backup_dir/$filename.$timestamp"
# Task 8: Check if a website is online
read -p "Enter a website URL: " url
if curl --output /dev/null --silent --head --fail "$url"; then
    echo "Website is up"
else
    echo "Website is down"
fi
script_task.sh[+] [unix] (15:07 01/06/2023)
-- INSERT --
```

Image 2: Results



```
MINGW64/c/Users/enwaeze/shell
$ mkdir shell
$ cd shell
$ touch script_task.sh
$ vi script_task.sh
$ chmod +x script_task.sh
$ ./script_task.sh
Enter your name: ejika nwaeze
Enter your age: 37 years
Enter a directory name: shell
total 0
Number of files: 0
Enter a list of numbers separated by spaces: 10 20 10 30 40 50 80
Sum of the numbers: 240
Random number: 97
Enter the filename to backup: script_task.sh
cp: cannot stat 'script_task.sh': No such file or directory
Backup created: backup/script_task.sh.20230601151109
Enter a website URL: www.google.com
Website is up
Enter temperature in Celsius: 37 degree
./script_task.sh: line 40: bc: command not found
Temperature in Fahrenheit:
Enter a sentence: i am a man
Reversed sentence: nam a ma i
$
```