SHELL SCRIPTING

Programs to run in linux environments

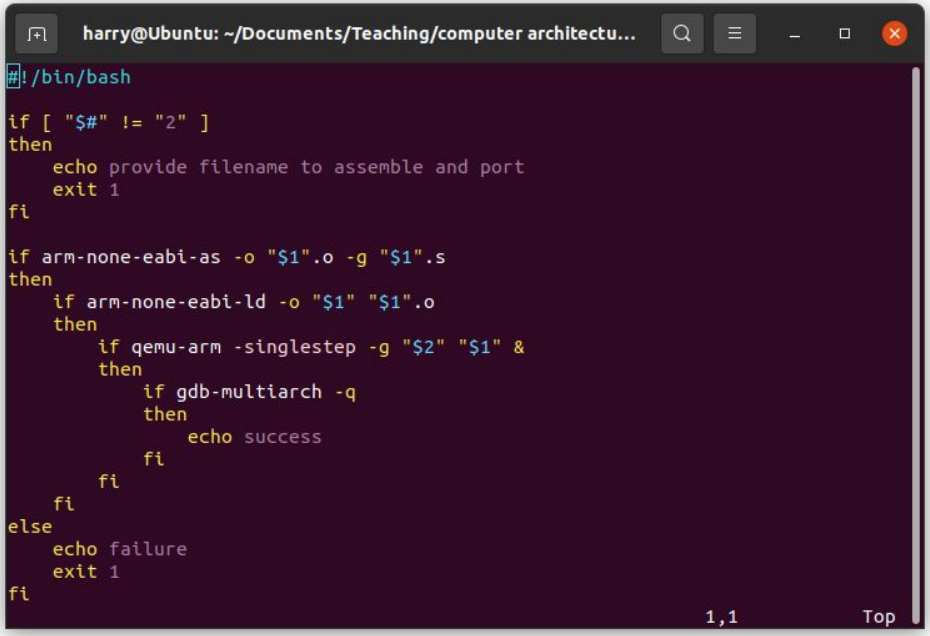
HELLO WORLD

```
#!/bin/bash
echo "Hello, World!"

Same as:

#include <stdio.h>
int main(){
    printf(“Hello, World”);
    Return 0;
}
```

VARIABLE

```
#!/bin/bash

NAME="$1"
echo "Hello, $1"
-----------------------------
$ ./hello.sh Harry
Hello, Harry

$ ./hello.sh Harry Field
Hello, Harry

$ ./hello.sh ‘Harry Field’
Hello, Harry Field
```

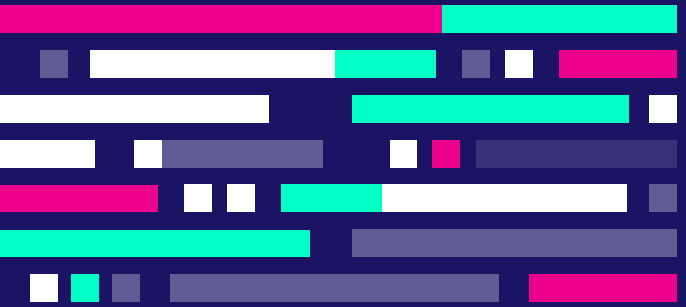
REMEMBER THIS?



This is terrible, I've made some improvements.

IMPROVED

```
#!/bin/bash

# e = fail script if any command fails
# u = fail script if reference to any undefined var
set -eu

filename="$1"
port="$2"

arm-none-eabi-as -o "$filename".o -g "$filename".s

arm-none-eabi-ld -o "$filename" "$filename".o

qemu-arm -singlestep -g "$port" "$filename" &

gdb-multiarch -iex "file $filename" -iex "target
remote localhost:$port" -q
```



TASK

Have a look through the file I have attached to this presentation. This file demonstrates a few different ways you can achieve the same functionality as I have described. Once you have done this, use your knowledge (and google) to attempt the shell scripting exercise in software tools.