Introduction to Computer Science
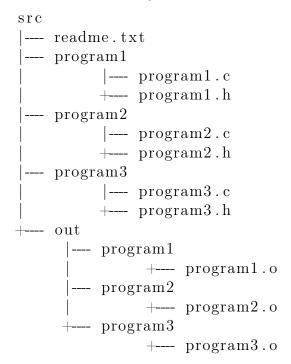
Laboratory 1

October 18, 2024

Part 1 : Shell commands

1. Use a shell command to print the name of your operating system. How you can get a more detailed output?   uname   uname -a

2. How you can tell which is the current directory?   pwd

3. Create a file and add some text to it (using a text edutor of your preference), then use a command to print the file's content in the terminal.   echo "This is some text" > myfile.txt
   cat myfile.txt

4. Delete (using a command) the file created previosly. The command you used can delete directories too?   rm

5. Print a message in the terminal. (Help: use echo).   echo "hahaha"

6. What happens if you try to create an already existent file? And if you try with a directory?   no happen if it is a file   mkdir: cannot create directory 'a': File exists

7. Create the following file structure:

```
src
|--- readme.txt
|--- program1
|        |--- program1.c
|        +--- program1.h
|--- program2
|        |--- program2.c
|        +--- program2.h
|--- program3
|        |--- program3.c
|        +--- program3.h
+--- out
     |--- program1
     |        +--- program1.o
     |--- program2
     |        +--- program2.o
     +--- program3
              +--- program3.o
```

1

8. How you can delete the recently created file strucure with only **one** command?

rm -r

Part 2 : C Programming

1. Write a program that prints a message in the screen, compile and run it.

2. What happens if you **don't** use the -o flag during compilation?

it will directly creat a file which is a.exe

3. This two C programs, print the same message? Why? What message do they print?

```c
#include <stdio.h>
int main() {
        printf("Hello ");
        printf("World\n");
        return 0;
}
```
Hello World

```c
#include <stdio.h>
int main() {
        printf("Hello World");
        printf("\n");
        return 0;
}
```
Hello World

4. And this two? Why? What message do they print?

```c
#include <stdio.h>
int main() {
        printf("Hello ");
        printf("World\n");
        return 0;
}
```
Hello World

```c
#include <stdio.h>
int main() {
        printf("World\n");
        printf("Hello ");
        return 0;
}
```
Hello
World

2