

# Introduction to Computers and Programming

## Bonus pC

2023/11/19

## 1. List File

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For some operating systems, we do not have a GUI to interact with machines. Hence, we have to type command as instruction to get result which we want.

In Unix, we always use `ls` to get which files in current folder.

```
$ ls
.
..
final.cpp
midterm.cpp
```

I want you to implement a program to do the same thing.

### Hint

You can use `FindFirstFile` and `FindNextFile` to help you iterate directory.

chatgpt response will have something wrong, so remember to fix it and execute it correctly.

## 2. File Information

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In this part, I want you to print file information.

### Input

First line contain a string  $S$  indicated file path.

- $1 \leq \text{len}(S) \leq 128$

## Output

First line print path, second line print file type, and third line print file size.  
Notice that if file size is greater than 1 GB, you just convert unit to MB at most.

## Hint

You can refer to posix function `stat`.

## Sample Input 1

```
C:\Users\user\Downloads\text1.txt
```

## Sample Output 1

```
C:\Users\user\Downloads\text1.txt  
Type: normal file  
Size: 10 bytes
```

## Sample Input 2

```
C:\Users\user\Downloads\text2.txt
```

## Sample Output 2

```
C:\Users\user\Downloads\text2.txt  
Type: normal file  
Size: 10 GB
```

## Sample Input 3

```
C:\Users\user\Downloads
```

## Sample Onput 3

```
C:\Users\user\Downloads
```

```
Type: directory
```

```
Size: 249 MB
```