

Programming Fundamentals Milestone 2
2019/20 Trimester 2
CHUA BING QUAN 1181303556
Lecture Section: TC01
Tutorial Section: TT01

1. Prompts the user to input a file name.

```
"C:\Users\User\Downloads\Programming Fundamentals\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"

Input Format:
-Drawing Character
-Speed of Refresh Cycle, from 1 to 10, with 10 being the fastest
-Phrase, maximum 25 characters
-Ancor Point, rows and columns
-Board Size, rows and columns
-Direction (lr: right, rl: left, ud: down, du: up, st: stationary)
-Wrap-Around (wr: wrap-around, no: no wrap-around)
-Rotation (rot90: rotate 90 degrees, rot-90: rotate -90 degrees, mr: mirror, no: no rotation)

Please enter a file name to run the program.
example : 'sample.txt'
Enter 'E' if you want to exit the program.

File Name => sample1.txt
```

-sample error message for wrong input

```
"C:\Users\User\Downloads\Programming Fundamentals\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"

*****
ERROR DETECTED
*****

ERROR!: Refresh cycle is from 1 to 10.
Your input: 11
ERROR!: Text should not be longer than 25 characters.
Please input a shorter message. Current length: 34
ERROR!: The program does not accept your direction input.
Only 'lr', 'rl', 'ud', 'du' or 'st' is accepted.
ERROR!: The program does not accept your wrap-around input.
Only 'wr' or 'no' is accepted.
ERROR!: The program does not accept your rotation input.
Only 'rot90', 'rot-90', 'mr' or 'no' is accepted.

Your input has 5 error(s).
Please correct your input and try to run the program again.

Please enter file name to run another program.
example : 'sample.txt'
Enter 'E' if you want to exit the program.

File Name => 
```

-sample error message if text file is not found

```
C:\Users\User\Desktop\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe
#####
Input FAILED :(
#####

File name is not found. Please check your file name and location.

Please enter file name to run another program.
example : 'sample.txt'
Enter 'E' if you want to exit the program.

File Name => _
```

2. Prompts user for 'Inception' Effect.

```
"C:\Users\User\Downloads\Programming Fundamental\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"
#####
INPUT SUCCESS!
#####

File Name      : sample1.txt
Message        : Hello
Drawing Character : #
Rows & Columns  : 18 30
Size of Board   : 20 40
Speed          : 10
Direction       : Moving Upwards
Wrap-Around     : Yes
Rotation        : Rotate 90 degrees

Would you like to have 'Inception' Effect? (Y/N):
```

3. Prompts user to time steps.

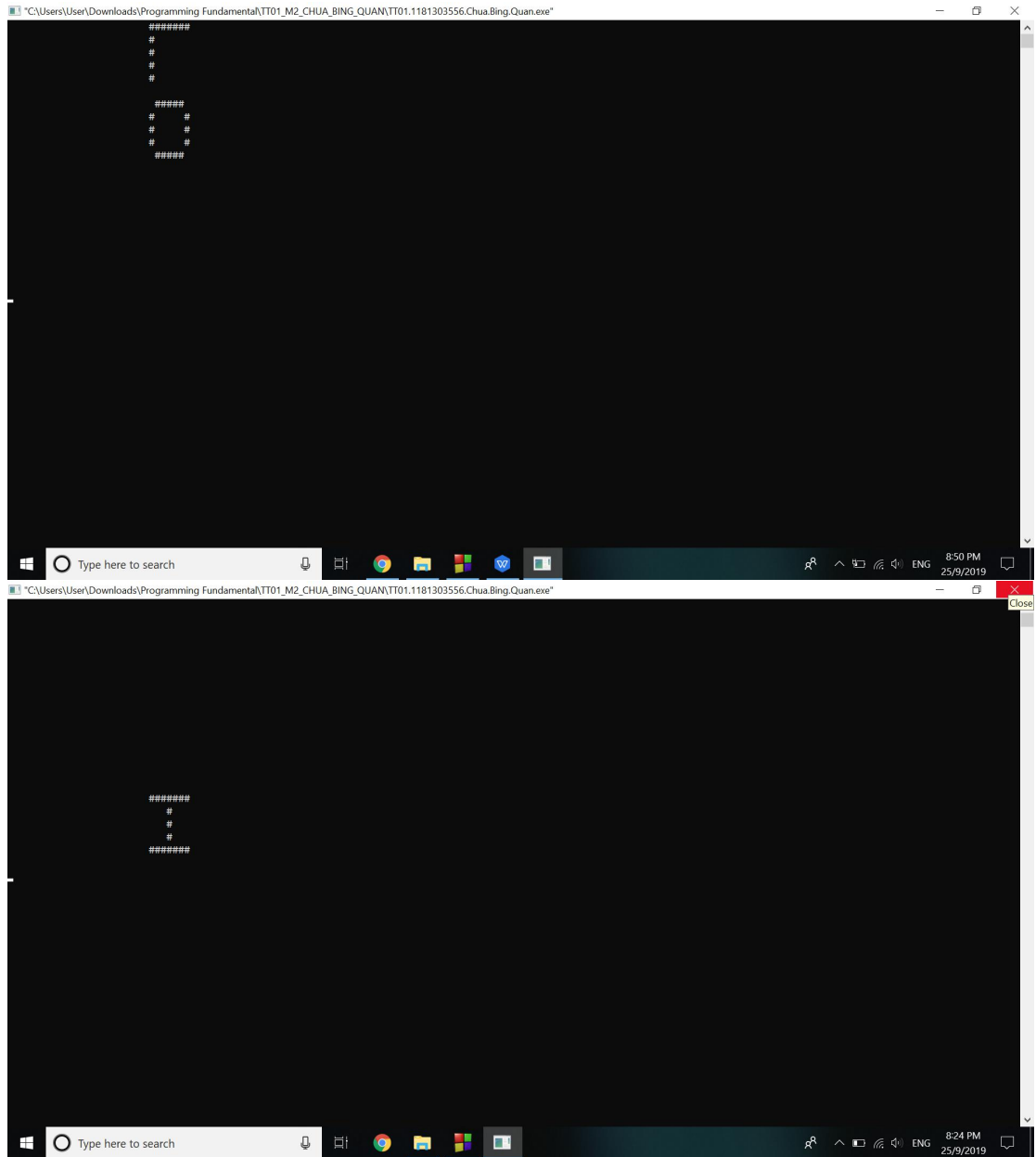
```
"C:\Users\User\Downloads\Programming Fundamentals\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"
#####
INPUT SUCCESS!
#####

File Name      : sample1.txt
Message       : Hello
Drawing Character : #
Rows & Columns : 18 30
Size of Board  : 20 40
Speed         : 10
Direction     : Moving Upwards
Wrap-Around   : Yes
Rotation      : Rotate 90 degrees

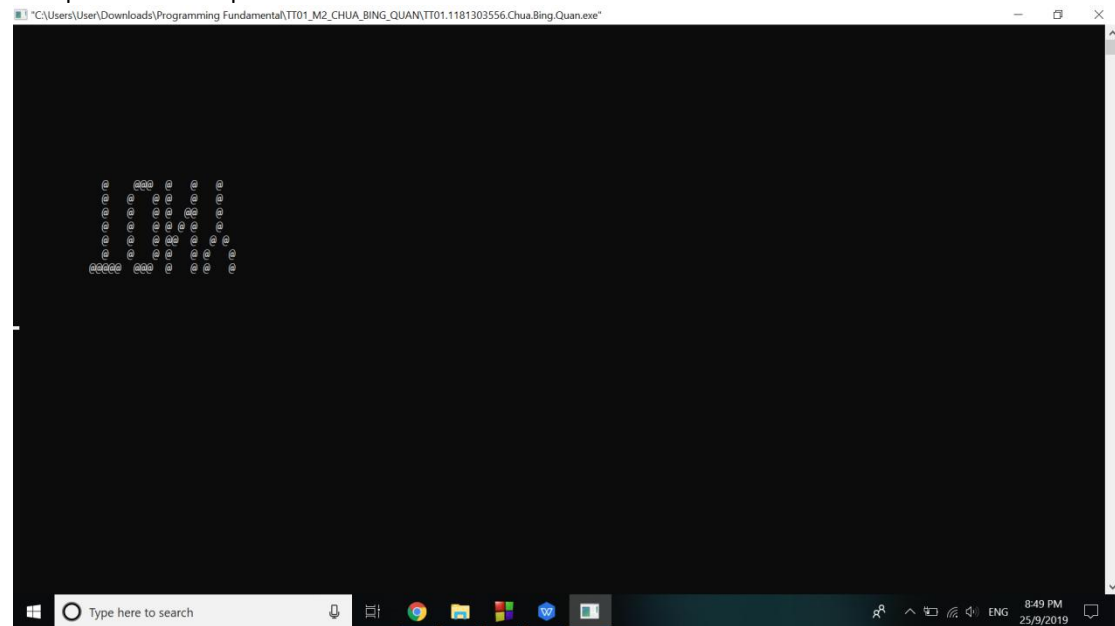
Would you like to have 'Inception' Effect? (Y/N): n
How many time steps would you like?
time steps => 100
```

-sample run for sample1.txt

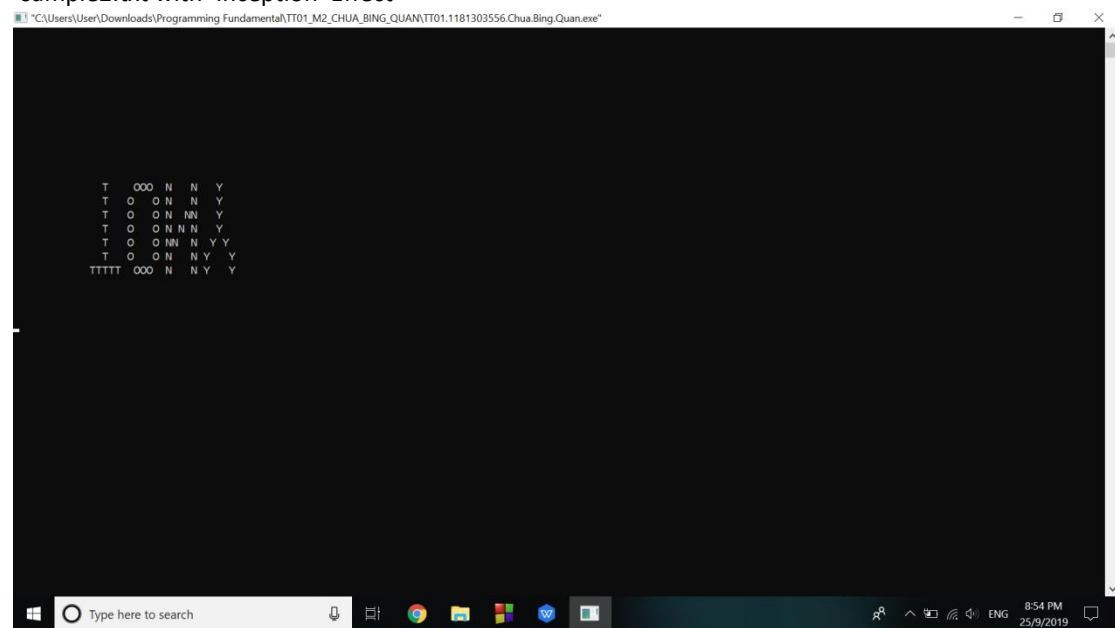
```
"C:\Users\User\Downloads\Programming Fundamentals\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"
#####
#####
# # #
# # #
# # #
# #
#####
#
#
#
#####
#
#
#
```



-sample run for sample2.txt



-sample2.txt with 'Inception' Effect



The image displays two sequential screenshots of a Windows command prompt window. The window title is "C:\Users\User\Downloads\Programming Fundamental\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe".

In both screenshots, the program has executed and printed a 5x5 grid of asterisks (*) on a black background. The output is as follows:

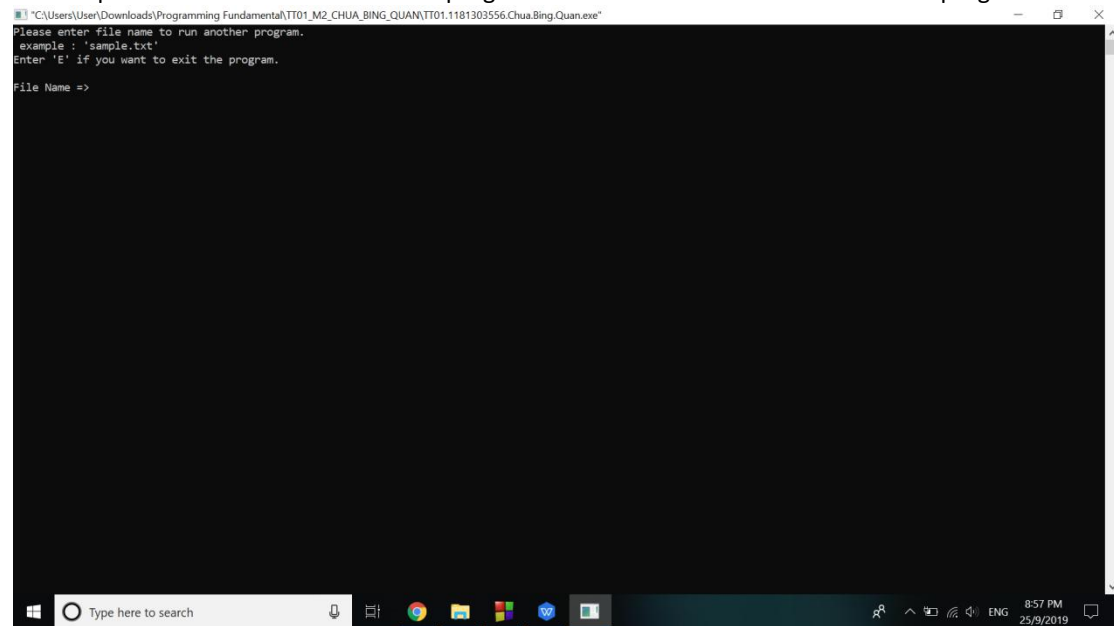
```

*  *
*  *  *
*  *  *
*  *  *
*  *

```

The first screenshot shows the output with a small delay, while the second screenshot shows the output with a larger delay, indicating a timing issue.

4. Prompts user for new file name after program ends. Users have a choice to exit the program too.



```
"C:\Users\User\Downloads\Programming Fundamental\TT01_M2_CHUA_BING_QUAN\TT01.1181303556.Chua.Bing.Quan.exe"
Please enter file name to run another program.
example : 'sample.txt'
Enter 'E' if you want to exit the program.

File Name =>
```