Name: Himanshu Sachdeva Roll Number: 2021256

# Description of shell

All source files are in the same folder/directory

"exit" to return from the shell

Input the commands after "\$" sign

## Commands Supported:

#### • Internal:

1. cd

Description: Changes Directory of the working shell Options Supported:

-P: symbolic link shall be resolved

-L: symbolic link shall not be resolved

**Edge Cases:** 

Arguments must be present Incorrect use of flags handled

2. echo

Description: to output the argument in command line Options Supported:

-n: does not add newline

--help: prints what option does

**Edge Cases:** 

Arguments must be present Incorrect use of flags handled

3. pwd

Description: prints the parent working directory Options Supported:

-P: symbolic link shall be resolved

-L: symbolic link shall not be resolved

**Edge Cases:** 

Handle if extra arguments passed Incorrect use of flags handled

#### External

1. Is

Description: Outputs all the subdirectories and files in the folder Options Supported:

Name: Himanshu Sachdeva Roll Number: 2021256

-a: outputs all files including beginning with .

-d: list the directory only and not its content

#### Edge Cases:

Invalid arguments handled Incorrect use of flags handled

#### 2. cat

Description: print the file contents

Options Supported:

-n: outputs along with line number

-E: adds "\$" at the end of line

#### **Edge Cases:**

Handled if file not exists Incorrect use of flags handled

#### 3. date

Description: prints the current date and time

Options Supported:

-R: output RFC 5322 format

-u: output UTC time

#### **Edge Cases:**

Handle if any is argument passed other than flag Incorrect use of flags handled

#### 4. rm

Description: removes/deletes the files or folders

**Options Supported:** 

-i: confirm before every folder (input "yes" to confirm)

-d: removes empty folder

#### **Edge Cases:**

If more than one file/folder specified Handled if less arguments passed Handled if file not exists Incorrect use of flags handled

#### 5. mkdir

Description: creates new directories

Options Supported:

-m: creates file with mode specified

-v: specifies user after every operation

#### **Edge Cases:**

If invalid mode is specified Incorrect use of flags handled Name: Himanshu Sachdeva Roll Number: 2021256

# • Multi-threading

add "&t" after the command, eg: Is &t

### • Test Cases

Is -a ..

Is &t -a ..

date

date -u

date -R