Name : Soni Dev Alpeshbhai Student Number : 130759210

dasoni4@mySeneca.ca

Skipping the details in the instructions document skips marks.

## Part 1 of 4: Visual Studio Community introduction (25%)

1. What platform are you working on: Windows, macOS, Linux?
What code editor / IDE did you use to create the demonstration helloWorld.c
source file?

```
OS platform: macOS code editor/IDE: Visual Studio Code
```

2. Where is your helloWorld.c source file? Paste its Full Path in the box:

/Users/devsoni/Documents/SENECA\_COLLEGE /SEM2-CPA/CPR101NOO/CP4P\_W1/helloWorld.c

3. What is in the helloWorld.c file? Source code, of course. Copy the text of your customized source statements from the Visual Studio editor and paste in the box below using the Paste Option to either Merge Formatting (M) or Keep Text Only (T).

```
/* Thanks to Brian Kernighan, 'Hello World' is the traditional first C program. It became legendary with the publication of "The C Programming Language" by Kernighan and Ritchie (1978). Now, Hello World is the canonical test of any programming language. *//*
Full Name: Soni Dev Alpeshbhai
Student ID#: 130759210
UserID/Email: dasoni4@mySeneca.ca
*/
#include <stdio.h> // C language module providing Input/Output facilities int main(void) // main() is automatically called to start a C program
{
printf("Hello, World!\n"); // output greeting
printf("This is Soni Dev.\n"); // output your name
return 0; // return to operating system
}
```

**N.B.** there is no need to submit the VS project or the .c source file itself with this week's activity...just your C code in the above answer box.

## Part 2 of 4: File names and file extensions (25%)

4. What do you see when each lunamoth file is dropped into a browser? (Firefox preferred) It will not be as expected from the file extension.

lunamoth.txt → It didn't show any normal text, as expected from a ".txt" file, but it showed some random symbols which cannot be interpreted by a human, i.e, the content was not readable at all.

lunamoth.jpg → When it was dropped into the browser (Firefox), an error message was displayed that the content of this file cannot be displayed because it has errors in it.

lunamoth.html → When the file was dropped into the Firefox browser, then the content which was displayed was a series of some random characters, not in a readable format, so it could not be interpreted by a human.

lunamoth.bmp → It displayed an error message saying that the file content cannot be displayed, since it does contain errors in it.

5. What should the proper extensions be for those files, and how did you know?

lunamoth.txt to lunamoth.\_jpg\_
How did you know to use that extension?

When I dragged and dropped the "lunamoth.txt" file into the notepad, then the content which was displayed on the notepad showed that the data or the content of the file starts with "ÿØÿà" - it is ISO 8859-1 (indicates how the file signature will appear when it is interpreted as a plain text in the common ISO 8859-1 encoding. So, due to that reason, it was clear that the file is a ".jpg" file since if it is a jpg file then its content start with "ÿØÿà" characters.

lunamoth.jpg to lunamoth.html
How did you know to use that extension?

When I dragged and dropped the "lunamoth.jpg" file into the notepad, then the content displayed was actually of an HTML document, since the text(information) were enclosed inside the HTML tags such as head and body tags. Moreover, it also contained CSS(Cascading Style Sheets) in that file, which signifies that it is ".html" document.

lunamoth.html to lunamoth.bmp How did you know to use that extension?

When I dragged and dropped the "lunamoth.txt" file into the notepad, then the content which was displayed on the notepad showed that the data or the content of the file starts

with "BM" - it is ISO 8859-1 (indicates how the file signature will appear when it is interpreted as a plain text in the common ISO 8859-1 encoding. So, due to that reason, it was clear that the file is a ".bmp" file, since the file content started with "BM".

lunamoth.bmp to lunamoth.txt
How did you know to use that extension?

When I opened the "lunamoth.bmp" file on the notepad, the content displayed was having human readeable normal characters, which we can expect from a ".txt" file. Hence, the file should be ".txt", not ".bmp"

#### 6. What are the logical steps to rename the lunamoth file?

```
Rename lunamoth from .txt to .????

from .jpg to .????

from .html to .????

from .bmp to .????

from .???? to .????
```

There is a logical way, to deal with this kind of situation which is to temporarily change the filename of one the files or change the extension of one of the file to that of a temporary file i.e, ".temp".

STEP 1: For an instance, "lunamoth.txt" can be change to "lunamoth.temp".

STEP 2: Afterwards, we can change the "lunamoth.bmp" file to "lunamoth.txt".

STEP 3: Following that, "lunamoth.html" can be changed to "lunamoth.bmp"

STEP 4: After that, "lunamoth.jpg" to "lunamoth.html"

STEP 5: Finally, "lunamoth.temp" can reverted back to "lunamoth.txt"

# 7. What does this experience tell you about the importance of file names and their extensions?

While computing, it's always important to have proper filenames and their extensions. Since, if we don't have meaningful filenames for our file, then it would be so confusing for us, to identify a specific file from a bunch of files. Moreover, the filename extensions are equally important as filename, because it helps the operating system to identify the type of document, which we are trying to open and the OS will be able to

recommend us, a specific application or software which are made to open that particular file.

# Part 3: Working with drives while doing common file/directory operations (25%)

8. What happens when you select the lunamoth files in your original folder, then drag and drop them to a **different folder** on the **same drive**? Do the files still exist in the original source location?

No, those files will not exist in the original source location. Since, by performing drag and drop with left mouse button, we are actually moving those files to a different folder, not copying them to a different destination.

9. While dragging a file anywhere within the **same drive** and continuing to hold the left mouse button, press the Ctrl key, then release the Ctrl key, then press the Ctrl key. How does the message displayed near the mouse pointer change?

By performing the above actions on a Windows machine, the message displayed near the mouse pointer will change from "move to (folder\_name)" to "copy to (folder\_name)". So, by performing the above actions, we can actually copy the selected files to a different folder, instead of moving them. Hence, the files will not get disappeared from the original file location.

10. What happens when you drop a file after dragging it with the right mouse button?

It depends, if we are working on a Windows machine, then if we perform drag and drop with the right mouse button, then it prompts an interface and ask us that if we wanted to copy the file, move the file or we wanted to create a shortcut of those particular files. However, if we are working on a MacOS, it doesn't matter if we are performing drag and drop by right clicking or left clicking the mouse button, it will just move those files to a different folder. If we wanted to copy a file, on a macOS, then we can do that by clicking "command key + C" - shortcut key and paste it (command + V) to our desired folder.

11. What happens when you select the lunamoth files in your original folder, then drag and drop them to a **different drive**? E.g. a USB drive, assuming you have one. Do the files still exist in the original source location?

Usually, when we drag and drop a file to a different drive, then it should get copied to the respective drive. However, if I try to perform drag and drop while clicking left mouse button, it will instantly move my file to the USB drive and so the files will not exist in the original source location. On the other hand, if I perform the same thing by right clicking the mouse button, then a prompt will pop up, asking me if I wanted to copy or move those files. So, in this if I select copy the files, then it will copy those files

to the USB, and hence, the files will be copied to the USB drive and I still have those files in my original source destination or folder.

12. After deleting a file from the PC's internal drive, can you get it back? If so, how?

After deleting a file from the PC's internal drive, we can restore that specific file back as it is. We just need to open the recycle bin, which can be found on the desktop or in the desktop folder in the file explorer. After launching the recycle bin, all we have to do is to search for that specific file, we wanted to restore and right clicking that file, will get us a prompt. In that prompt, there will be an option for restoring our file. After clicking on restore, it will restore our file to the original source location.

13. How can a file on the PC's internal drive be deleted permanently?

While deleting a file from the PC's internal drive, it will move that specific file to the recycle bin. Hence, we still have to delete that file again from the recycle bin, in order to delete that file permanently from our PC.

14. If you have a USB drive, is it the Removable or External type?

If you have files in the "cloud", where are they?

After deleting a file from a USB or the cloud, can you get it back? If so, how?

USB drive, is a removable type since, we can eject the USB drive after completing our work.

If we have files on the cloud, then that means those files are being stored on a file server or on to that specific cloud server on the internet.

If the USB drive, is a removable type, then we cannot get our file back, after deleting it from the USB drive. However, if the USB drive is an external type, then we can restore the files from the recycle bin, after deleting them from the USB external drive.

On the other hand, on the cloud, facilities are offered to restore our files which we deleted from the cloud. For an instance, if we delete a file from the google drive (Google cloud service), then we can restore that specific file from the bin folder which is there on the google drive. The only drawback which is there on most of the cloud servers is that the file remains only for a specific or limited time in the bin. After that time, it gets deleted permanently from the bin.

# Part 4: Managing and Backing up your files (25%)

15. Using the web app version of your Microsoft 365 OneDrive, try to edit a text file, a C source code file, and an MS Office file (Word or Excel or PowerPoint) stored there. How did it work? Have you installed the local OneDrive application? Whether yes or no, for what reasons?

After using the web app version of Microsoft 365 OneDrive, we can actually edit any file on the cloud server online without saving them on our local machine. We can instantly download that edited file on our PC as well, if needed.

Yes, I have installed the local OneDrive application on my machine because, in order to readily access the cloud files and the services they provide.

16. It takes effort to copy files and directories from a USB drive or OneDrive / cloud to the local drive, work with and save them locally, and then transfer back to the source. Is it worth the effort? Why or why not? What are the benefits and risks in having the same file on both your local system *and* on a removeable drive or a remote system?

No, the effort is not worth at all since we can access and edit those files and directories on USB drive or OneDrive easily without saving them on our local machine. There are some benefits of this, we can actually save alot of space on our local machine, while having our backup files on the cloud or USB drive. However, there is a risk of having alot of files with the same name, hence it can create a lot of ambiguity for us. Moreover, those backed up files can only be accessed when there is an internet connection, so if there is no connection available for the machine, having a backup on the cloud server is meaningless.

17. What are the locations of your backup copies and how frequently do you do a backup?

I usually back up my files on iCloud. Since, it is easy to access the files on the cloud platform and also due to the fact that cloud services provide several latest features to deal with files and folders. They are also scalable and not bounded by physical features or specifications. Moreover, there is a disadvantage of using cloud servers for backups which is that they need internet connection to access the server and that's why I also backup my files on my removable USB drive, to access my files when there is no internet connection at all and also for avoiding any casualities. I usually perform backup operations twice in a fourth month period.

There are three frogs on a lily pad, and one decides to jump in the water. How many frogs are on the lily pad?

There are still 3(three) frogs on the lily pad, since the other frog just decided to jump into the water. However, it's not yet specified over here, whether the frog jumped into the water or not.