

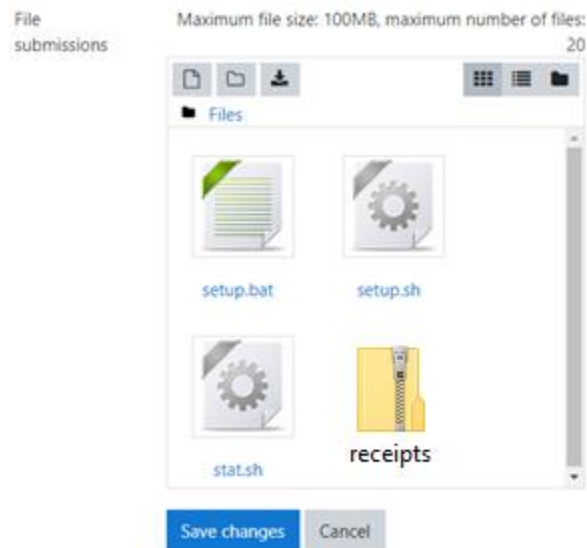


The University of the West Indies, St. Augustine
Department of Computing and Information Technology
INFO 3601 Assignment 1 – 10%
Due: 03/10/2025 Friday; 5:00 p.m.

Submission Instructions

For Question 1, 3 & 4: Upload the scripts directly to the submission box. **No zipping, no folders or subfolders.**

For Question 2: Upload the zip file, which contains all the directories, and files.



Question 1: Windows Batch exercise

Create a “setup.bat” script file that creates a “Library” folder in the Documents directory with the following folders and files. **(Note: this script should work regardless of its location in the filesystem and the currently logged in user)**

a. About.md should contain “Alma Jordan Library”

b. Algorithm.txt should contain “Operating Systems Concepts by Abraham Silberschatz”.

```
C:\USERS\VIJAY\DOCUMENTS\LIBRARY
```

```
|
|   About.md
|
|----CompSci
|      |___Algorithm.txt
|
|----Physics
|
|----Chemistry
```

[5 marks]

Question 2: Windows Automation

Create the following structure of customers and their data files data.txt. Each data.txt file contains 6 integers representing quantities and prices for apples, bananas and oranges purchased by the customer.

C:\USERS\SNICK\DESKTOP\QUESTION2

```
|  
+---alice_smith  
|   data.txt  
+---bob_jones  
|   data.txt  
+---carol_clark  
    data.txt
```

- A) Implement a c program named billing.c and compile it into calc.exe that takes 3 quantities and 3 prices of the products as input, prints the bill of items and totals. Both files should be in the root of the question2 folder.

Example:

Input:

Output:

```
XYZ Shop  
Port of Spain, Trinidad  
Ph. : 100 - 1000  
  
=====
```

BILLING RECEIPT			
=====			
Product	Qty	Price	Subtotal

Apples	1.00	\$ 7.00	\$ 7.00
Oranges	3.00	\$ 9.00	\$ 27.00
Bananas	5.00	\$ 2.00	\$ 10.00

TOTAL			\$ 44.00
=====			

THANK YOU FOR SHOPPING @ XYZ Shop

- B) Implement a receipts.bat batch script in the root folder so it executes calc.exe for each customer using each of their data.txt file and creating a receipt.txt file in their folder containing the output of calc.exe as well as the currently logged in username and date on top. An example of receipt.txt is shown below.

```
Cashier: USERNAME| 19/09/2025 15:10:40.36
|
|   XYZ Shop
|   Port of Spain, Trinidad
|   Ph. : 100 - 1000
|
=====
| | | BILLING RECEIPT
=====
Product      Qty      Price      Subtotal
-----
Apples       1.00    $  7.00    $   7.00
Oranges      3.00    $  9.00    $  27.00
Bananas      5.00    $  2.00    $  10.00
-----
TOTAL                               $  44.00
=====
THANK YOU FOR SHOPPING @ XYZ Shop
```

USERNAME should be currently logged user and date & hour should be system date & time. Submit receipts.zip, it should contain all the directories and files.

[10 marks]

Question 3: Linux project deployment Script

Create a script “setup.sh” to automate the deployment of a flask application. The script must install all software dependencies such as:

1. Python3
2. Pip3
3. Git

Use git to clone [this repository](#).

Install dependencies

Initialize the database (instructions in readme)

Run the with gunicorn

[5 marks]

Question 4: Linux Automation

Write a script “stat.sh” that will do the following:

1. Ask for a file name and remove the input file that was provided.
2. Before removing, backup the file in the Backup folder.
3. Everyday at 5 p.m., backup all the files in Backup folder as one compressed file (should be named using system date like DDMMYYYY.tar or DDMMYYYY.zip) and remove the Backup folder.

[10 marks]