**Learning Objective: Understand and compute the two types of cash flow statements:**

1. Accounting Statement of Cash Flows
2. Financial Cash Flow (also known as Cash flow To Assets)

Note: Cash flow to Assets is equal to the sum of Cash flow to Creditors + Cash flow to Stockholders. Creditors and stockholders are the two main claimants for the firm.

**In order to complete this Homework, you need to have finished Module 3 Videos!**

**REMINDER: THE EXCEL PORTION OF THIS HOMEWORK MUST BE DONE INDIVIDUALLY. DO NOT SHARE YOUR EXCEL FILE WITH OTHERS.**

This homework will be completed in Excel, but only the most basic Excel knowledge is required. The main objective of this homework is finance-related, not as much Excel-related.

This homework is to ensure learners understand the “basics” of Accounting Cash Flow and “Free Cash Flow” (Cash flow from Assets). Excel learning objectives are very minimal.

The financial statements in this example are very basic. In “the real world” (which we will see) financial statements are more complex. But when we are first learning, we are taking a view from 10,000 feet to ensure understanding.

What each learner should glean from this assignment:

1. **Key to Accounting Cash Flow Statement**: The statement indicates where all sources and uses of cash are, across three areas: Operating, Investments, and Financing.
2. **Key to Cash Flow From Assets and Cash Flow to Claimants**: In finance, we separate the investment and financing decision. The assets are an investment which produces cash flows. The assets were funded by claims, debt and equity. Therefore, any cash produced by the assets will be distributed to the claimants (debtholders and equityholders).
3. **How this HW is intended to prepare learners for valuation of a firm (which is covered later in the class):** Since the value of anything is the present value of the cash flows it produces, when we value a firm, we need to understand what cash flows the firm produces. The firm is comprised of assets. So “Cash Flows From Assets” are the key to firm valuation. Simply, we will project these cash flows into the future and discount them back to today and arrive at a price of those assets, which is effectively the price of the firm.

**Continued on next page**

**Instructions for completion:**

Please use the Excel File that is attached to the HW assignment in Canvas, named “Balance\_Sheets\_Income\_Statements (Template for HW 1) Spring 2025.xlsx to complete the following:

1. Accounting Statement of Cash flows
2. Cash flow from Assets
3. Cash flow to Creditors (Debtholders)
4. Cash flow to Stockholder (Equityholders)

**Very important: 0 and blank are different values. A blank value in a financial statement means no value is assigned to that account/entry. A ZERO means that account/entry had a value of zero. Deductions will apply for “blank” versus “Zero.”**

This file is organized as follows:

Two years of balance sheets are shown From Cell B3 through M26.

The 2023 income statement begins in Cell Q4.

The Accounting Statement of Cash Flows begins in Cell B29.

Cash flow to Assets and the Cash flow to Claimants begins in Cell Q29.

Complete the “INFORMATION SHEET” (first worksheet in the file) by entering your Family name and GT Login (not your nine digit student ID). **Only enter your last name (also known as a family name).**

When you complete your assignment, please save your file as follows:

HW\_1\_YOURLASTNAME

So, for me, it would be: HW\_1\_Garner.xlsm

SAVE AS A MACRO ENABLED FILE. This helps with grading. So, the file extension should be: .xlsm

**All work must be done individually. Do not share your files with other students.**

==========================================================

**Instructions for Writing Formulas:**

**Any cell which requires a formula needs a formula. A formula can be as easy as a cell reference such as: =E8. Do not “HARD CODE” any numbers. Example:**

**Suppose =E8-F8 is written in Cell G8. This “formula” returns a value of $50, but do not just type 50 in Cell G8. Write the formula that returns 50 which is =E8-F8.**

**Any cell which is “filled” with a GRAY color must have a formula. For the balance sheet, please write your change formulas (Columns G and M) as follows:**

Changes should always follow the format: “Current year less prior year.”   
So, for the change in cash and equivalents which should be placed in Cell G8, your formula should be: =E8-F8

**Continued on next page**

**For the Accounting Statement of Cash Flows, please write your formulas as follows:**

“Pull” your changes that you computed in the balance sheet area. “Pull” means reference another cell and/or cells. Do not write another “change” formula. Do not “hard code” the value (meaning just type a number). Indicate whether the value should have a positive or negative effect on cash.

Example:

On Line 54 of the excel file, you have an entry for “Purchase of Stock” (this label is in B54). The formula that you should write in Cell G54 is simply:

=M23.

If the effect on cash is OPPOSITE of the change (*which is the case for assets*), simply put a negative sign in front of what you are “Pulling” from your change. So, for example:

You will compute the change in inventories in G10 (in the balance sheet area). You will find a positive change in inventories of $48. But the effect on cash is an outflow, so your formula in the Accounting Statement of Cash flows in cell G40 is:

=-G10

**For the Missing Labels on the Accounting Statement of Cash Flows, please write your formulas following these instructions:**

Some of the “Labels” on the Accounting Statement of Cash Flows are missing. The label indicates what happened to the balance sheet account. Please write a simple **if statement formula** for each of these based on whether the account went up or down.

The **if statement formula** should refer to the changes you already computed in Columns G and M of your balance sheet.

Example: Since Inventories went up, your label should be:

Increase in Inventories

However, we want the labels to populate correctly regardless of the increase or decrease in the account.

Example: =If(Account change>0,”Increase in Account”, “Decrease in Account”)

Where “account” could be inventories, accounts payable, etc.

**Note the above “formula” will not work in Excel as is! (Close, but not quite)**

**Continued on next page**

Please **GO IN ORDER OF THE BALANCE SHEET** to create your labels.

In the operating section of the Statement of Cash Flows, tackle current assets first and then current liabilities.

Some labels are already in the spreadsheet; only write a formula for the missing ones!!!

The label for changes in Property, Plant and Equipment vary across firms (see HW #1 Conceptual for more detail). Therefore, we are flexible in the grading of these types of labels.

The same issue applies to changes in debt. Consider using wording such as “Payoff of long-term debt”, “Payoff of short-term debt”, when debt balances decrease. When debt balances increase, you may want to consider “Proceeds from short-term debt” and “Proceeds from long-term debt.”

**GOODWILL should be treated like Property, Plant and Equipment.  So, an increase in Goodwill is the same as an increase in Gross PPE!**

**So, for the accounting statement of CFs, the investing section should be the change in Property, Plant and equipment (Gross) plus the change in Goodwill. If this total change is positive, the impact on cash is an outflow.**

Subtotals for subsections of the Statement of Cash flows should be computed using the SUM function, rather than the plus signs.

Write an IF STATEMENT in Cell H60 indicating YES if the change in cash from the statement of cash flows matches the change in cash from the balance sheet. Otherwise, NO.

**The IF Statement which checks whether the change in the balance sheet cash account equals the final entry on the statement of cash flow should ROUND the change in the cash account (from balance sheet) and round the last entry from the statement of cash flows.  Note: you only need to use ROUND within your If Statement when referencing these items.**Round to the nearest integer which is round( , 0).

Note: If you have done this assignment correctly, Cell H60 should read YES! ☺

**For the Financial Cash Flows (Cash flow to Assets and Cash flow to the Claimants), please write your formulas as follows:**

Please just “pull” the items you need from other places in the sheet. If a change is needed, and that change is already computed on the balance sheet, reference the change (rather than recalculating a change).

**Cash flow from assets: For item #2, “Investment in Fixed assets”, you will get the same number as you did in the INVESTING section of the Accounting Statement of Cash Flows (Cell G47),but will go about it a slightly different way.**

**Reminder: Cell G47 is already an “outflow” where Cell S46 will be a positive number that is subtracted (as outflow) in Cell S55. The absolute values of these numbers are the same!**

**Ending Net fixed assets should be the sum of Ending NET PPE Plus Ending Goodwill.  
Beginning Net fixed assets should be the sum of Beg NET PPE plus Beginning Goodwill.  
Subtract Beginning # from Ending #.  
Then add depreciation expense to this difference.**

Use the “box” beginning in cell Q58 to compute net working capital and then reference these cells (i.e., those in the “box”) when computing the change in net working capital in Cells S49 and S50.

**On CF from assets and CF to creditor/equityholders, please pay attention to the SIGNS of items. Example, if the firm issues new equity, then net new equity is POSITIVE (cell W43) and then you subtract that positive number to obtain Cell W44.**

**PLEASE READ THE LAST PAGE OF THIS DOCUMENT, NEXT PAGE:**

**REMINDERS:**

Remember to fill out the information worksheet! Only put your LAST name (known as family name). Your GT Login is NOT your nine digit student ID. For me, it’s jgarner47.

Remember to name your file as indicated on the second page of the instructions!

Another reminder: 0 and blank are different values. A blank value in a financial statements means no value is assigned to that account/entry. A ZERO means that account/entry had a value of zero. Deductions will apply for “blank” versus “Zero.”

**THE EXCEL PORTION OF THIS HOMEWORK MUST BE DONE INDIVIDUALLY. DO NOT SHARE YOUR EXCEL FILE WITH OTHERS.**

**Working together on individual assignments is considered a violation of the Georgia Tech Student Code of Conduct.**

In this course, you will be provided with template files to use for homework and case assignments. Unless you are specifically instructed to do so, **do not make any adjustments to the formatting of these documents,** such as inserting/deleting rows or tabs in the workbook. Should you make changes to the template, you will earn whatever grade the auto-grader assigns, because there is not a practical way for the TA team to grade your file manually. We will allow one re-submission if this situation occurs, with the template corrected, for a maximum of 85% of the credit.

This re-submission is for a specific situation; in general, re-submissions (for incorrect answers) are not allowed. Further, normal “re-grades” (as a result of a grading error) do not impose any penalty for the learner.

**END OF INSTRUCTIONS**