T-Account

What is a T-Account
A T-account is an informal term for a set of financial records that uses double-entry bookkeeping. The term describes the appearance of the bookkeeping entries. First, a large T is drawn on a page. The title of the account is then entered just above the top horizontal line, while underneath debits are listed on the left and credits are recorded on the right, separated by the vertical line of the letter T.

A T-account is also called a ledger account.

Understanding T-account
In double-entry bookkeeping, a widespread accounting method, all financial transactions are considered to affect at least two of a company's accounts. One account will get a debit entry, while the second will get a credit entry to record each transaction that occurs.

The credits and debits are recorded in a general ledger, where all account balances much match. The visual appearance of the ledger journal of individual accounts resembles a T-shape, hence why a ledger account is also called a T-account.

A T-account is the graphical representation of a general ledger that records a business' transactions. It consists of the following:

- An account title at the top horizontal line of the T
- A debit side on the left
- A credit side on the right

Example of T-Account
If Barnes & Noble Inc. sold $20,000 worth of books, it will debit its cash account $20,000 and credit its books or inventory account $20,000. This double-entry system shows that the company now has $20,000 more in cash and a corresponding $20,000 less in inventory on its books. The T-account will look like this:

Assets

Debit (Dr)	Credit (Cr)
10/29 Cash $20,000	10/29 Books $20,000

T-Account Recording
For different accounts, debits and credits may translate to increases or decreases, but the debit side must always lie to the left of the T outline and the credit entries must be recorded on the right side. The major components of the balance sheet - assets, liabilities and shareholders' equity (SE) - can be reflected in a T-account after any financial transaction occurs.

The debit entry of an asset account translates to an increase to the account, while the right side of the asset T-account represents a decrease to the account. This means that a business that receives cash, for example, will debit the asset account, but will credit the account if it pays out cash.

The liability and shareholders’ equity (SE) in a T-account have entries on the left to reflect a decrease to the accounts and any credit signifies an increase to the accounts. A company that issues shares worth $100,000 will have its T-account show an increase in its asset account and a corresponding increase in its equity account

Assets	
Cash $10,000	

Shareholders’ Equity	
	Common Shares $10,000

Balance Sheet

1. Definition:

The term balance sheet refers to a financial statement that reports a company's assets, liabilities, and shareholder equity at a specific point in time. In short, the balance sheet is a financial statement that provides a snapshot of what a company owns and owes, as well as the amount invested by shareholders.

2. How Balance Sheets Work:

The balance sheet provides an overview of the state of a company's finances at a moment of time. It cannot give a sense of trends playing out over a longer period on its own. For this reason, the balance sheet should be compared with those of previous periods.

The balance sheet adheres to the following accounting equation, with assets on one side, and liabilities plus shareholder equity on the other, balance out:

Assets = Liabilities + Shareholders' Equity

This formula is intuitive. That is because a company has to pay for all the things it owns (assets) by either borrowing money (taking on liabilities) or taking it from investors (issuing shareholder equity).

If a company takes out a five-year, $4,000 loan from a bank, its assets (specifically, the cash amount) will increase by $4,000, balancing the two sides of the equation. If the company takes $8,000 from investors, its assets will increase by that amount, as well its shareholder equity. All revenues the company generates in excess of its expenses will go into the shareholder equity account. These revenues will be balanced on the asset side, appearing as cash, investments, inventory, or other assets.

3. Components of a Balance Sheet

Assets

Accounts within this segment are listed from top to bottom in order of their liquidity. This is the ease with which they can be converted into cash. They are divided into current assets, which can be converted to cash in one year or less; and non-current or long-term assets, which cannot.

Here is the general order of accounts within current assets:

- Cash and cash equivalents are the most liquid assets and can include Treasury bills and short-term certificates of deposit, as well as hard currency
- Marketable securities are equity and debt securities for which there is a liquid market.
- Accounts receivable (AR) refer to money that customers owe the company. This may include an allowance for doubtful accounts as some customers may not pay what they owe.
- Inventory refers to any goods available for sale, valued at the lower of the cost or market price
- Prepaid expenses represent the value that has already been paid for, such as insurance, advertising contracts, or rents.

Long-term assets include the following:

- Long-term investments are securities that will not or cannot be liquidated in the next year.
- Fixed assets include land, machinery, equipment, buildings, and other durable, generally capital

capital-intensive assets.

- Intangible assets include non-physical (but still valuable) assets such as intellectual property and goodwill. These assets are generally only listed on the balance sheet if they are acquired, rather than developed in-house. Their value may thus be widely understated (by not including a globally recognized logo, for example) or just as widely overstated.

Liabilities

A liability is any money that a company owes to outside parties, from bills it has to pay to suppliers to interests on bonds issued to creditors to rent, utilities and salaries. Current liabilities are due within one year and are listed in order of their due date. Long-term liabilities, on the other hand, are due at any point after one year.

Current liabilities accounts might include:

- Current portion of long-term debt is the portion of a long-term debt due within the next 12 months. For example, if a company has a 10 years left on a loan to pay for its warehouse, 1 year is a current liability and 9 years is a long-term liability.
- Interest payable is accumulated interest owned, often due as part of a past-due obligation such as late remittance on property taxes.
- Wages payable is salaries, wages, and benefits to employees, often for the most recent pay period.
- Customer prepayments is money received by a customer before the service has been provided or product delivery. The company has an obligation to (a) provide that good or service (b) return the customers' money.
- Dividends payable is dividends that have been authorized for payment but have not yet been issued.
- Earned and unearned premiums is similar to prepayments in that a company has received money upfront, has not yet executed on their portion of an agreement, and must return unearned cash if they fail to execute.
- Accounts payable is often the most common current liability. Accounts payable is debt obligation on invoices processed as part of the operations of a business that are often due within 30 days receipt.

Long-term liabilities can include:

- Long-term debt includes any interest and principal on bonds issued.
- Pension fund liability refers to the money a company is required to pay into its employee's retirement accounts.
- Deferred tax liability is the amount of taxed that accrued but will not be paid for another year. Besides timing, this figure reconciles differences between requirements for financial reporting and the way tax is assessed

Some liabilities are considered off the balance sheet, meaning they do not appear on the balance sheet.

Shareholder Equity

Shareholder equity is the money attributable to the owners of a business of its shareholders. It is as known as net assets since it is equivalent to the total assets of a company minus its liabilities or the debt it owes to non-shareholders.

Retained earnings are the net earnings a company either reinvests in the business or uses to payoff debt. The remaining amount is distributed to shareholders in the form of dividend.

Treasury stock is the stock a company has repurchased. It can be sold at a later date to raise cash or reserved to repel a hostile takeover.

Some companies issue preferred stock, which will be listed separately from common stock under this section. Preferred stock is assigned an arbitrary par value (as is common stock, in some cases) that has no bearing on the market value of the shares. The common stock and preferred stock accounts are calculated by multiplying the par value by the number of shares issued.

Additional paid-in capital or capital surplus represents the amount shareholders have invested in excess of the common or preferred stock accounts, which are based on par value rather than market price. Shareholder equity is not directed related to a company's market capitalization. The latter is based on the current price of a stock, which paid-in capital is the sum of the equity that has been purchased at any price.

Income Statement

What Is a Income Statement?

An income statement is one of the three important financial statements used for reporting a company's financial performance over a specific accounting period. The other two key statements are the balance sheet and the cash flow statement.

The income statement focuses on the revenue, expenses, gains, and losses of a company during a particular period. Also known as the profit and loss (P&L) statement or the statement of revenue and expense, an income statement provides valuable insights into a company's operation, the efficiency of its management, underperforming sectors, and its performance relative to industry peers.

The income statement focuses on four key items: revenue, expenses, gains, and losses. It does not differentiate between cash and non-cash receipts (sales in cash vs. sales on credit) or cash vs. non-cash payments/disbursements (purchases in cash vs. purchases on credit). It starts with the details of sales and then works down to compute net income and eventually earnings per share (EPS). Essentially, it gives a account of how the net revenue realized by the company gets transformed into net earnings (profit or loss).

Revenue and Gains

The following and covered in the income statement, though its format may vary, depending upon the local regulatory requirements, the diversified scope of the business, and the associated operating activities:

Operating Revenue

Revenue realized through primary activities is often referred to as operating revenue. For a company manufacturing a product, or for a wholesaler, distributor, or retailer involved in the business of selling that product, the revenue from primary activities refers to revenue achieved from the sale of the product. Similarly, for a company (or its franchisees) in business of offering services, revenue from primary activities refers to revenue achieved from the sale of the product. Similarly, for a company (or its franchisees) in the business of offering services, revenue from primary activities refers to the revenue or fees earned in exchange for offering those services.

Non-Operating Revenue

Revenue realized through secondary, noncore business activities is often referred to as non operating, recurring revenue. This revenue is sourced from the earnings that are outside the purchase and sale of goods and services and may include from interest earned on business capital parked in the bank, rental income from business property, income from strategic partnerships like royalty payment receipts, or income from an advertisement display placed on business property.

Gains

Also called other income, gains indicate the net money made from other activities, like the sale of long-term assets. These include the net income realized from one-time non business activities, such as company selling its old transportation van, unused land, or a subsidiary company.

Revenue should not be confused with receipts. Payments is usually accounted for in the period when sales are made or services are delivered. Receipts are the cash received and are accounted for when the money is received.

A customer may take goods/services from a company on Sept. 28, which will lead to the revenue accounted for in September. The customer may be given a 30-day payment window due to his excellent credit and reputation, allowing until Oct. 28 to make the payment, which is when the receipts are accounted for.

Expenses and Losses

A business's cost to continue operating and turning a profit is known as an expense. Some of these expenses may be written off on a tax return if they meet Internal Revenue Service (IRS) guidelines.

Primary-Activity Expenses

These are all expenses incurred for earning the average operating revenue linked to the primary activity of the business. They include the cost of goods sold (COGS); selling, general, and administrative (SG&A) expenses; depreciation or amortization; and research and development (R&D) expenses. Typical items that make up the list are employee wages, sales commissions, and expenses for utilities such as electricity and transportation.

Secondary-Activity Expenses

These are all expenses linked to noncore business activities, like interest paid on loan money.

Losses as Expenses

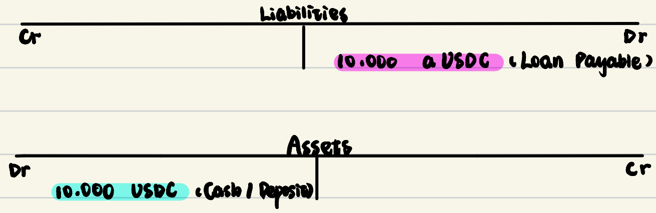
These are all expenses that go toward a loss-making sale of long-term assets, one-time or any other unusual costs, or expenses toward lawsuit.

While primary revenue and expenses offer insights into how well the company's core business is performing, the secondary revenue and fess account for the company's involvement and expertise in managing ad hoc. Compared with the income from the sale of manufactured goods, a substantially high-interest income from money lying in the bank indicates that the business may not be using the available cash to its full potential by expanding the production capacity, or that it is facing challenges in increasing its market share amid competition.

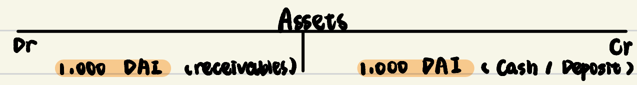
Recurring rental income gained by hosting billboards at the company factory along a highway indicates that management is capitalizing uptown the available resources and assets for additional profitability.

TVL Measurement

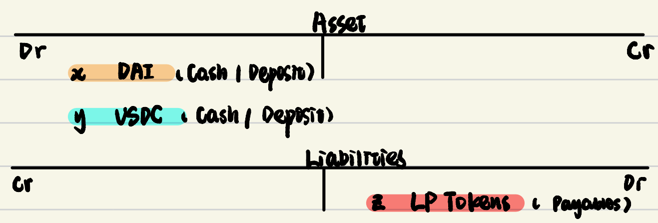
1. **Deposit into lending protocol**
   Deposit 10,000 USDC into Aave, a lending protocol. It receives Aave's interest bearing tokens call aTokens, which are pegged 1:1 to the value of the underlying assets that is deposited in Aave protocol. In this case, the protocol contract increases the loan payable aUSDC in liabilities and increases the USDC in assets.



2. **Borrow from lending protocol**
   Borrow 1,000 DAI, a stable coin, from Maker Protocol by depositing $1,500 worth of ETH (Maker requires overcollaterization at 150% of the borrowed assets).



3. **Be a liquidity provider**
   Deposit both x DAI and y USDC to the Uniswap V2, a decentralized exchange, and issue z LP tokens.



Scenario 1: Aave, Compound, Yearn

Scenario 2: Aave, Compound, MakerDAO

Scenario 3: Uniswap V2, Uniswap V3, Curve, Balancer