

PROBLEM SOLVING PROCESS

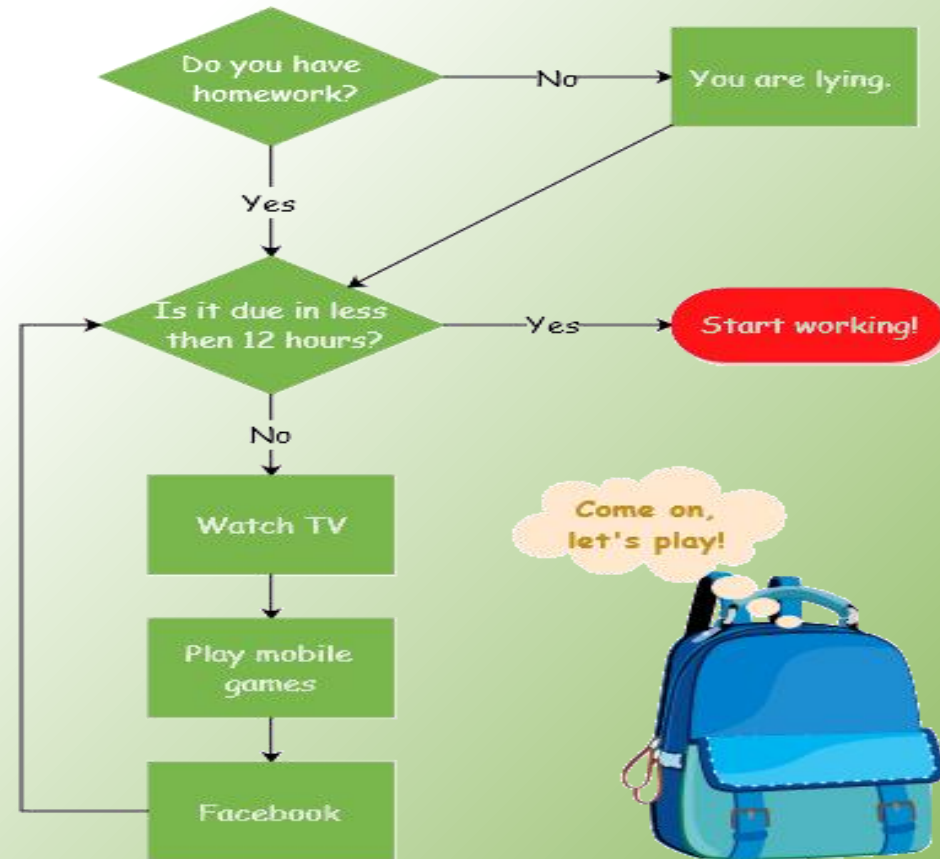
Class IX
lab 6





Flowchart

Flowcharts are used in analyzing, designing, documenting or managing a process or program





Flowchart Symbols

Flowcharts are used to illustrate algorithms in order to aid in the visualisation of a program.

Flowcharts are to be read top to bottom and left to right in order to follow an algorithms logic from start to finish. Below is an outline of symbols used in flowcharts.

Terminator

Terminator

Used to represent the Start and end of a program with the Keywords **BEGIN** and **END**.

Process

Process

An instruction that is to be carried out by the program.



Arrow

Indicates the flow of the algorithm pathways.

Decision

Decision

Used to split the flowchart sequence into multiple paths in order to represent **SELECTION** and **REPETITION**.

Input / Output

Input / Output

Used to represent **data entry** by a user or the **display** of data by the program.

Subprogram

Subprogram

References another program within the program.



Hand Washing Example

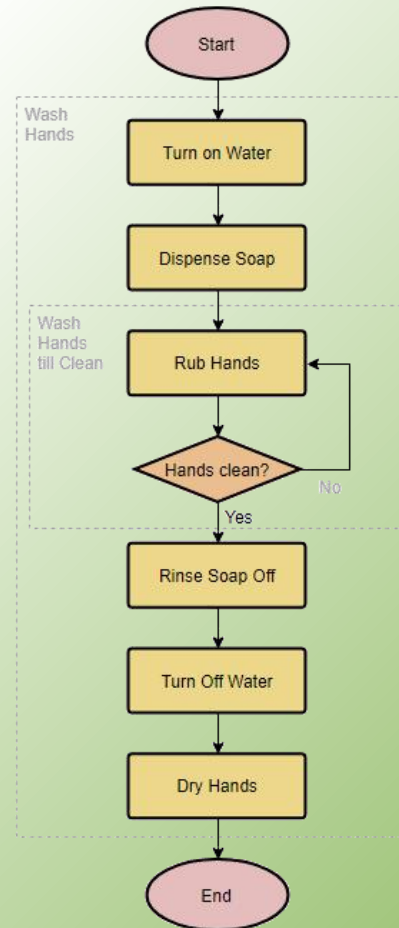
Initial Flowchart



Breakdown Task



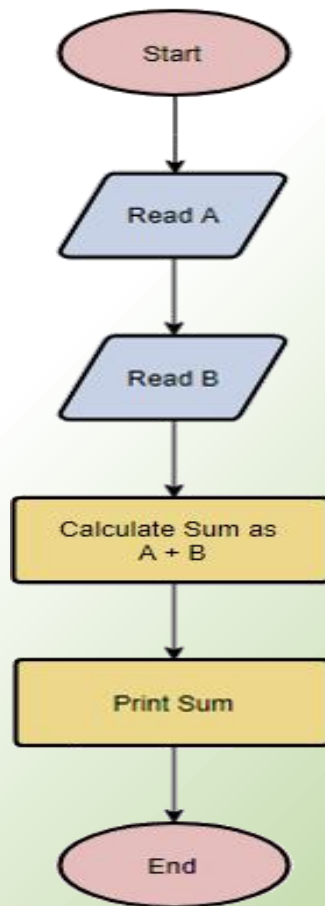
Consider Alternatives





Simple Algorithms

Find the sum of 529 and 256



Start

A = 529

B = 256

Sum = 529 + 256

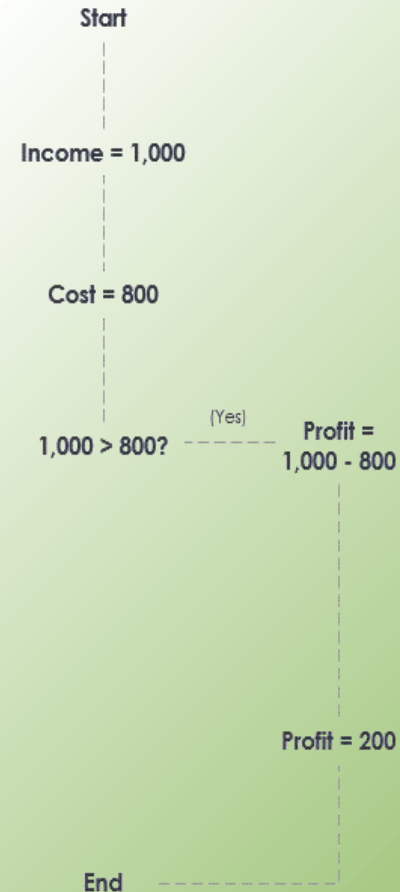
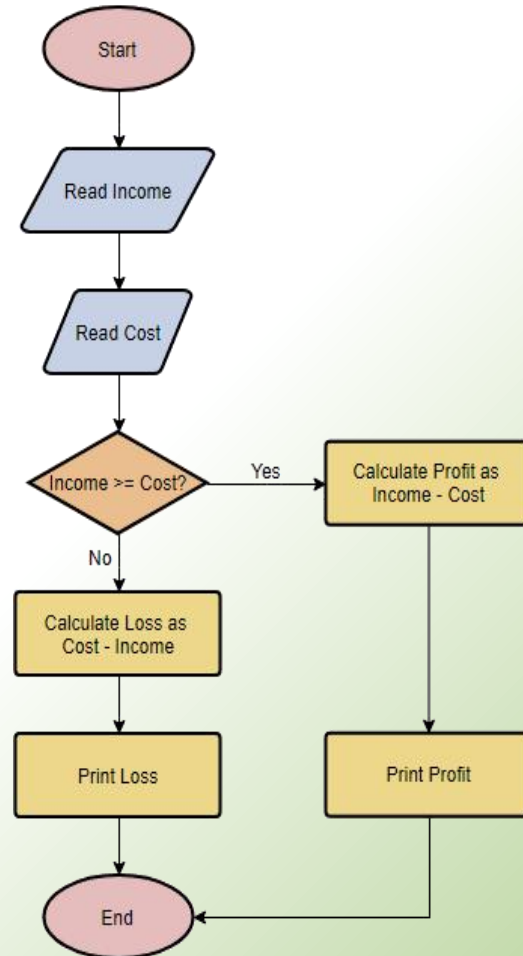
Sum = 785

End



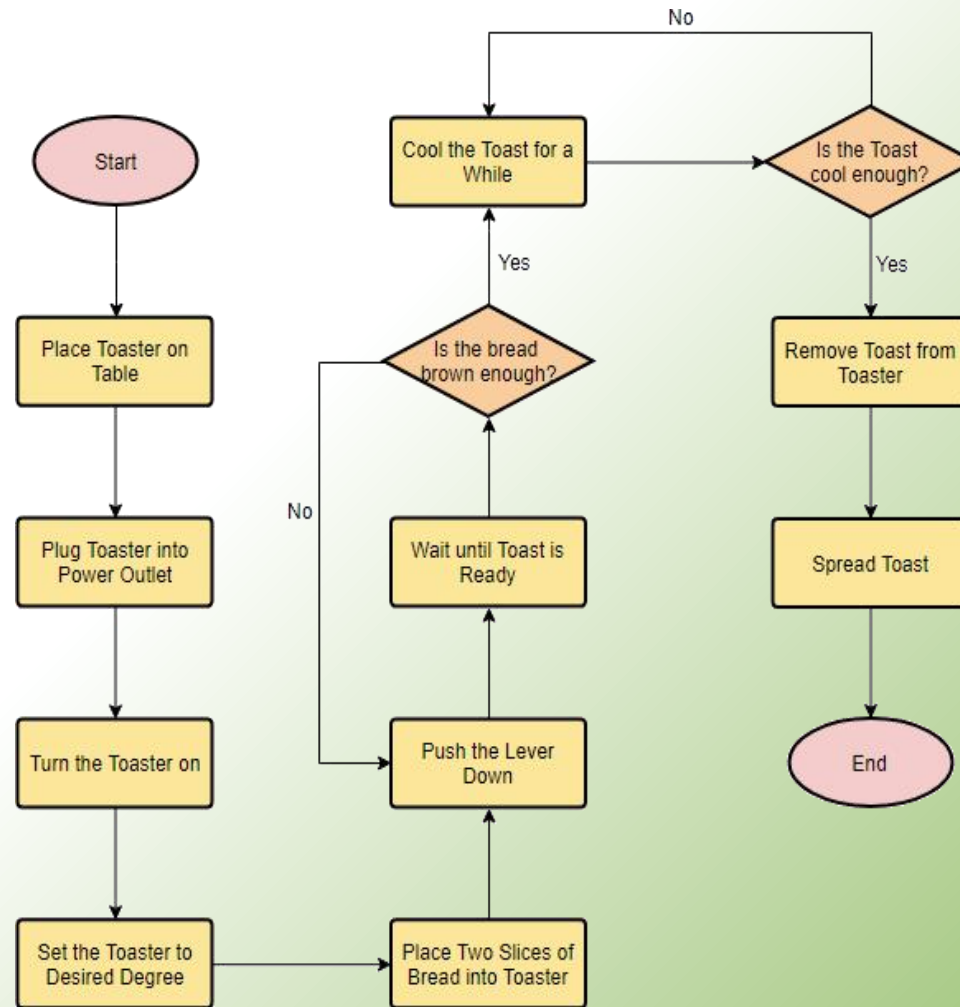
Calculate Profit and Loss

Find the profit/loss when
income = 1,000, cost = 800





Make a Toast





**Thank
you!**

