IPO Table

**Definition** - An IPO Table or Defining Diagram identifies the inputs to a program, the outputs the program will generate, and the processing steps required to transform the inputs into the outputs.

**Example:**

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| --- | --- | --- |
| **Input** | **Processing** | **Output** |
| Unit Price | Read unit price, quantity purchased, discount code | Net amount due |
| Quantity Purchased | Calculate gross amount due |  |
| Discount Code | If discount applies, calculate discount amount |  |
|  | Calculate net amount due |  |
|  | Print net amount due |  |

To Determine the Inputs and Outputs you should look for nouns and adjectives as you **read** the problem.  Verbs will most likely be processes.

**Example:**

A program is required to read three numbers, add them together, and print their total.

nouns  verbs

|  |  |  |
| --- | --- | --- |
| **Input** | **Processing** | **Output** |
| number\_1 | Read three numbers | total |
| number\_2 | Add numbers together |  |
| number\_3 | Print total number |  |
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|  |  |  |