



AICP Internship Task Week 1

An online computer shop sells customized personal computers. Every computer sold includes a basic set of components costing \$200 and additional items can be added from the table:

Category	Item code	Description	Price (\$)
Case	A1	Compact	75.00
	A2	Tower	150.00
RAM	B1	8 GB	79.99
	B2	16 GB	149.99
	B3	32 GB	299.99
Main Hard Disk Drive	C1	1 TB HDD	49.99
	C2	2 TB HDD	89.99
	C3	4 TB HDD	129.99
Solid State Drive	D1	240 GB SSD	59.99
	D2	480 GB SSD	119.99
Second Hard Disk Drive	E1	1 TB HDD	49.99
	E2	2 TB HDD	89.99
	E3	4 TB HDD	129.99
Optical Drive	F1	DVD/Blu-Ray Player	50.00
	F2	DVD/Blu-Ray Re-writer	100.00
Operating System	G1	Standard Version	100.00
	G2	Professional Version	175.00



As well as the basic set of components every computer must include one case, one RAM, and one Main Hard Disk Drive from the table.

A computer is supplied with or without an Operating System.

Write and test a program or programs for the online computer shop.

- Your program or programs must include appropriate prompts for the entry of data; data must be validated on entry.
- Error messages and other outputs need to be set out clearly and understandably.
- All arrays, variables, constants and other identifiers must have meaningful names.

You will need to complete these three tasks. Each task must be fully tested.

Task 1 – Setting up the system and ordering the main items.

Write a program to:

- use arrays to store the item code, description and price
- allow a customer to choose one case, one RAM and one Main Hard Disk Drive
- calculate the price of the computer using the cost of the chosen items and the basic set of components
- store and output the chosen items and the price of the computer.

Task 2 – Ordering additional items.

Extend TASK 1 to:

- allow a customer to choose whether to purchase any items from the other categories – if so, which item(s)
- update the price of the computer
- store and output the additional items and the new price of the computer.

Task 3 – Offering discounts.

Extend TASK 2 to:

- apply a 5% discount to the price of the computer if the customer has bought only one additional item.
- apply a 10% discount to the price of the computer if the customer has bought two or more additional items.
- output the amount of money saved and the new price of the computer after the discount.