

Set Task Brief

You are asked to use your software design, development, testing and evaluation skills to produce a program that meets the client's requirements.

The owner of a local pizza restaurant has commissioned you as a Junior Software Developer to write a program that will help their staff calculate the cost of takeaway pizza orders.

You need to create a program that will allow the staff to enter this information:

- customer details:
 - name
 - address
 - phone number
- the quantity of pizzas being ordered
- the size of each pizza. An order can include different pizza sizes
- an option to add more toppings to the standard pizzas if required
- an option to request delivery.

The program should then provide the user with a personalised and itemised bill that shows:

- customer details
- the cost of each pizza, showing standard cost of the pizza and any extra toppings
- any discount applied
- any delivery charge
- the total cost of the order.

You will design, implement and test your program. You must also justify and evaluate your decisions.

When you are designing and developing the solution ensure that:

- standard programming conventions have been followed
- it is efficient and robust
- a suitable data structure is used
- outputs are meaningful
- it is easy to use
- the program is tested using normal, abnormal and extreme data
- there is an output displaying the personalised and itemised bill.

Information

You are provided with this information to use when designing and developing your program:

- maximum and minimum quantity of pizzas in any one order
- standard sizes and cost of pizzas
- cost of any extra toppings
- discount
- delivery charge.

Maximum and minimum pizzas in any one order

Minimum quantity of pizzas = 1

Maximum quantity of pizzas = 6

Standard sizes and costs of pizzas

Small = £3.25

Medium = £5.50

Large = £7.15

Cost of any extra toppings

1 extra topping = £0.75p

2 extra toppings = £1.35

3 extra toppings = £2.00

4 or more extra toppings = £2.50

Discount

10% discount for any orders over £20 before delivery cost is applied.

Delivery charge

£2.50 standard charge.