PSEUDO CODE FOR CUSTOM KITCHENS APPLICACTION

**Task 2: Pseudocode and Object Definition Sheet – 15 Marks**

• Write pseudocode to design the event procedure for validating the width of the kitchen. Width is compulsory (it cannot be null) and must be between 120 centimetres and 600 centimetres inclusive.

START

length = INPUT(“Length”)

width = INPUT(“Width”)

maximumBudget = INPUT(“Maximum budget”)

IF length = “” THEN

OUTPUT(“Length can not be null! Minimum value of 150 will be set!”)

length = 150

END IF

IF width = “” THEN

OUTPUT(“Width can not be null! Minimum value of 120 will be set!”)

width = 120

END IF

IF length < 150 THEN

OUTPUT(“The length entered can only be a minimum of 150”)

length = 150

ELSE IF length > 600 THEN

OUTPUT(“The length entered can only be a maximum of 600”)

length = 600

END IF

IF width < 120 THEN

OUTPUT(“The width entered can only be a minimum of 120”)

width = 150

ELSE IF width > 600 THEN

OUTPUT(“The width entered can only be a maximum of 600”)

width = 600

END IF

IF maximumBudget < 1000 THEN

OUTPUT(“The maximum budget entered can only be a minimum of 1000”)

maximumBudget = 1000

ELSE IF maximumBudget > 25000 THEN

OUTPUT(“The maximum budget entered can only be a maximum of 25000”)

maximumBudget = 25000

END IF

OUTPUT(“Inputs are valid!”)

STOP

• Write pseudocode to design the event procedure for selecting and displaying the suitable kitchen styles to be displayed, based on the customer’s kitchen dimensions (length and width) and maximum budget.

START

length = INPUT(“Length”)

width = INPUT(“Width”)

maximumBudget = INPUT(“Maximum budget”)

IF length >= 150 & width >= 60 THEN

IF maximumBudget >= 1000 THEN

OUTPUT("Small straight kitchen with Laminate countertop")

END IF

IF maximumBudget >= 1500 THEN

OUTPUT("Small straight kitchen with Wood block countertop")

END IF

IF maximumBudget >= 2200 THEN

OUTPUT("Small straight kitchen with Granite countertop")

END IF

END IF

IF length >= 250 & width >= 180 THEN

IF maximumBudget >= 3500 THEN

OUTPUT("Small L-shaped kitchen with Laminate countertop")

END IF

IF maximumBudget >= 4500 THEN

OUTPUT("Small L-shaped kitchen with Wood block countertop")

END IF

IF maximumBudget >= 5750 THEN

OUTPUT("Small L-shaped kitchen with Granite countertop")

END IF

END IF

IF length >= 350 & width >= 60 THEN

IF maximumBudget >= 5250 THEN

OUTPUT("Medium straight kitchen with Laminate countertop")

END IF

IF maximumBudget >= 6200 THEN

OUTPUT("Medium straight kitchen with Wood block countertop")

END IF

IF maximumBudget >= 8000 THEN

OUTPUT("Medium straight kitchen with Granite contertop")

END IF

END IF

IF length >= 350 & width >= 240 THEN

IF maximumBudget >= 6500 THEN

OUTPUT("Medium L-shaped kitchen with Laminate countertop")

END IF

IF maximumBudget >= 7750 THEN

OUTPUT("Medium L-shaped kitchen with Wood block countertop")

END IF

IF maximumBudget >= 9500 THEN

OUTPUT("Medium L-shaped kitchen with Granite countertop")

END IF

END IF

IF length >= 450 & width >= 350 THEN

IF maximumBudget >= 8250 THEN

OUTPUT(“Large L-shaped kitchen with Laminate countertop”)

END IF

IF maximumBudget >= 9500 THEN

OUTPUT(“Large L-shaped kitchen with Wood block countertop”)

END IF

IF maximumBudget >= 12500 THEN

OUTPUT(“Large L-shaped kitchen with Granite countertop”)

END IF

END IF

IF length >= 500 & width >= 60 THEN

IF maximumBudget >= 6750 THEN

OUTPUT(“Large straight kitchen with Laminate countertop”)

END IF

IF maximumBudget >= 8500 THEN

OUTPUT(“Large straight kitchen with Wood block countertop”)

END IF

IF maximumBudget >= 11000 THEN

OUTPUT(“Large straight kitchen with Granite countertop”)

END IF

END IF

IF length >= 450 & width >= 450 THEN

IF maximumBudget >= 12500 THEN

OUTPUT(“Large island kitchen with Laminate countertop”)

END IF

IF maximumBudget >= 15000 THEN

OUTPUT(“Large island kitchen with Wood block countertop”)

END IF

IF maximumBudget >= 23000 THEN

OUTPUT(“Large island kitchen with Granite countertop”)

END IF

END IF

STOP

• Produce an Object Definition Sheet for the full program (see object definition sheet).

**Object Definition Sheet**

Non-default properties at design time Event procedures that have to be written

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Type** | **Property** | **Value** | **Event procedure** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |