Software Design & Development – Revision Questions 2: Answers

WHILE choice < "A" OR choice > "F"
Conditional Loop
The condition at line 6 would be evaluated as FALSE So the loop would terminate
And at line 9 the Signal would be sent to the alert system
Real
It must store a decimal value (103.5) so it has to be a real number.
total = 0
FOR index = 1 TO 7
RECEIVE rain_day FROM KEYBOARD
total = total + rain_day
NEXT index
average = total / 7
Running total must be used inside the fixed loop. Average is calculated by dividing total by 7
Input – Age
Process – Calculate Ticket Price
Output – Ticket Price
UNTIL cracked = TRUE
Boolean variable cracked is set to TRUE when the code is correct so the loop only has to repeat until cracked is set to TRUE
Boolean
Line 26 to Line 31 uses a conditional loop (Iteration)
Line 27 to Line 29 uses an IF statement (Selection)
Flow Chart
Structure Diagram
Green10KA19
DO
RECEIVE postcode FROM KEYBOARD
IF LEN(postcode) <> 4 THEN
SEND "Error message" TO DISPLAY
END IF
REPEAT UNTIL LEN(postcode) =4
Use the LENGTH function here to check that the number of characters in the surname is equal to 4