Paper reference 1CP2/01
Pearson Edexcel
Level 1 / Level 2 GCSE (9-1)

COMPUTER SCIENCE
UNIT 1: PRINCIPLES OF COMPUTER SCIENCE

Data Book

In the boxes below, write your name, centre number and learner registration number.

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INSTRUCTIONS

There may be spare copies of some diagrams incase you need them.

THIS DATA BOOK MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.

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Question 5 (a)
Algorithm that prints colours

```
1   # ---------- Global variables ----------
2   inkColours = [“Cyan”, “Magenta”, “Yellow”, “Black”]
3
4   # ---------- Subprograms ----------
5   def displayAll (inList):
6         for index in range (0, len (inList)):
7               print (index, inList[index])
8
9   # ---------- Main Program ----------
10   userInput = input (“Would you like to see the colours? ”)
11   if ((userInput == “y”) or (userInput == “Y”)):
12      displayAll (inkColours)
13   else:
14         print (“Thank you”)
```

Question 5 (b)
Algorithm searches a sorted array of numbers for a target value.

```
18    while ((index < len (theArray)) and (not found) and
      (not passed)):
19          if (theArray[index] == theTarget):
20             found = True
21             location = index
22          elif (theArray[index] > theTarget):
23             passed = True
24          index = index + 1
```

Question 5 (c)

Program which checks the weight of boxes of strawberries from Laura's shop.

```
1  count = 0
2  weight = 0
3  accept = 0
4  reject = 0
5
6  while (count < 4):
7          count = count + 1
8          weight = int (input ("Enter weight of box:  "))
9          if ((weight < 395) or (weight > 405)):
10             reject = reject + 1
11         else:
12             accept = accept + 1
13
14 print (accept, reject)
```

Question 5 (c)

Trace table showing the execution of the program with these inputs.

count	accept	reject	weight	Display

Question 5 (c)

count	accept	reject	weight	Display

Question 5 (d)

Blank space to draw a flowchart to show the algorithm.

Question 5 (d)