# Homework 1

1. Draw a flowchart for a program which asks the user to enter a password. If the user enters “HiThere!” then print “Welcome”, and continue (indicate continuation with a dotted line).

If they enter a different password, print “Wrong password” and end the program. [4]

2. An algorithm is to be written which calculates the average of a set of student marks entered at a keyboard. The flowchart on the next page describes the steps in the algorithm. However, most of the stages have been omitted.

Complete the flowchart, using item number only, from the list of items given.

|  |  |
| --- | --- |
| **Item number** | **Item description** |
| 1 | Is mark = -1? |
| 2 | Prompt for next mark |
| 3 | Output “No marks entered” |
| 4 | Input mark |
| 5 | Add 1 to count |
| 6 | Output average |
| 7 | total = 0 |
| 8 | Is count = 0? |
| 9 | Add mark to total |
| 10 | average = total/count |

Start

count = 0

Prompt for

first mark

Input mark

Yes

Yes

No

No

End

[6]

[Total 10 marks]