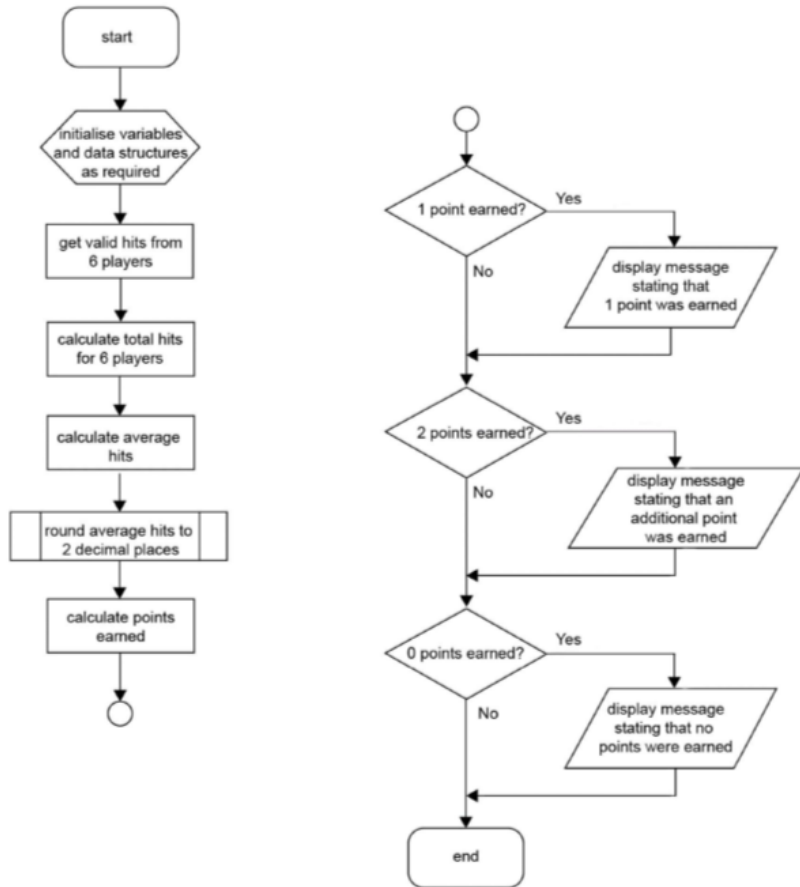


Design

Program design (flow chart)



Implementation

```

> main.py
1 #Specimen Assignment 2017-18
2 #Capturing Olympus
3 #Example Solution
4
5
6 #Initialise variables and data structures
7 player=""
8 score=[0]*6
9 avgScore=0.0
10 totalScore=0
11 points=0
12
13
14 #Start loop 3for each of 6 players
15 for counter in range (6):
16
17
18 #Get valid hits from 6 players
19 score[counter]=int(input("How many hits did you score?"))
20 while score[counter] <0 or score[counter] > 30:
21     print("Invalid - please enter a value between 0 and 30")
22     score[counter]=int(input("Please re-enter hits"))
23
24
25 #Calculate average and total scores99
26 totalScore=totalScore+score[counter]
27
28 #Calculate average outside the loop
29 avgScore=totalScore/6
30
31
32 #Rounding to 2 decimals - update avgScore variable.
33 avgScore=round(avgScore,2)
34
35 #Display scores
36 print("_____")
37 print("The total score is "+str(totalScore))
38 print("The average score is "+str(avgScore))
39
40 #Calculating points earned
41 if totalScore > 50:6
42     points = points + 1
43 if avgScore >=10:
44     points = points + 1
45
46 #Display points message.
47 if points == 1:
48     print("1 point has been earned")
49 elif points==2:
50     print("2 points have been earned")
51 else:
52     print("0 points have been earned")
53
    
```