

Assignment 4.1

Switch Case

Course Code: CPE007

Program: Computer Engineering

Course Title: Programming, Logic an Design

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6. Output

CODE:

```
1  #include <iostream>
2  using namespace std;
3
4  int main() {
5      int English, Chemistry, Physics, Trigonometry, UTS;
6
7      cout << "English: ";
8      cin >> English;
9
10     cout << "Chemistry: ";
11     cin >> Chemistry;
12
13     cout << "Physics: ";
14     cin >> Physics;
15
16     cout << "Trigonometry: ";
17     cin >> Trigonometry;
18
19     cout << "UTS: ";
20     cin >> UTS;
21
22     int average = (English + Chemistry + Physics + Trigonometry + UTS) / 5;
23
24     cout << endl;
25     cout << "Average is: " << average << endl;
26
27     cout << "Grade Level: ";
28     switch (average / 10) {
29         case 10:
30             case 9: cout << "A\n"; break;
31             case 8: cout << "B\n"; break;
32             case 7: cout << "C\n"; break;
33             case 6: cout << "D\n"; break;
34             case 5: cout << "E\n"; break;
35             case 4: cout << "F\n"; break;
36             default: cout << "F\n"; break;
37     }
38
39     return 0;
40 }
```

OUTPUT:

```
English: 100
Chemistry: 95
Physics: 97
Trigonometry: 100
UTS: 89
```

```
Average is: 96
Grade Level: A
```

```
-----
Process exited after 42.23 seconds with return value 0
Press any key to continue . . . |
```

PSUEDO CODE:

Start

Input English, Chemistry, Physics, Trigonometry, UTS as integer
Declare average as integer

Declare "English: "
Input English
Display "Chemistry: "
Input Chemistry
Display "Physics: "
Input Physics
Display "Trigonometry: "
Input Trigonometry
Display "UTS: "
Input UTS

Set average = (English + Chemistry + Physics + Trigonometry + UTS) / 5

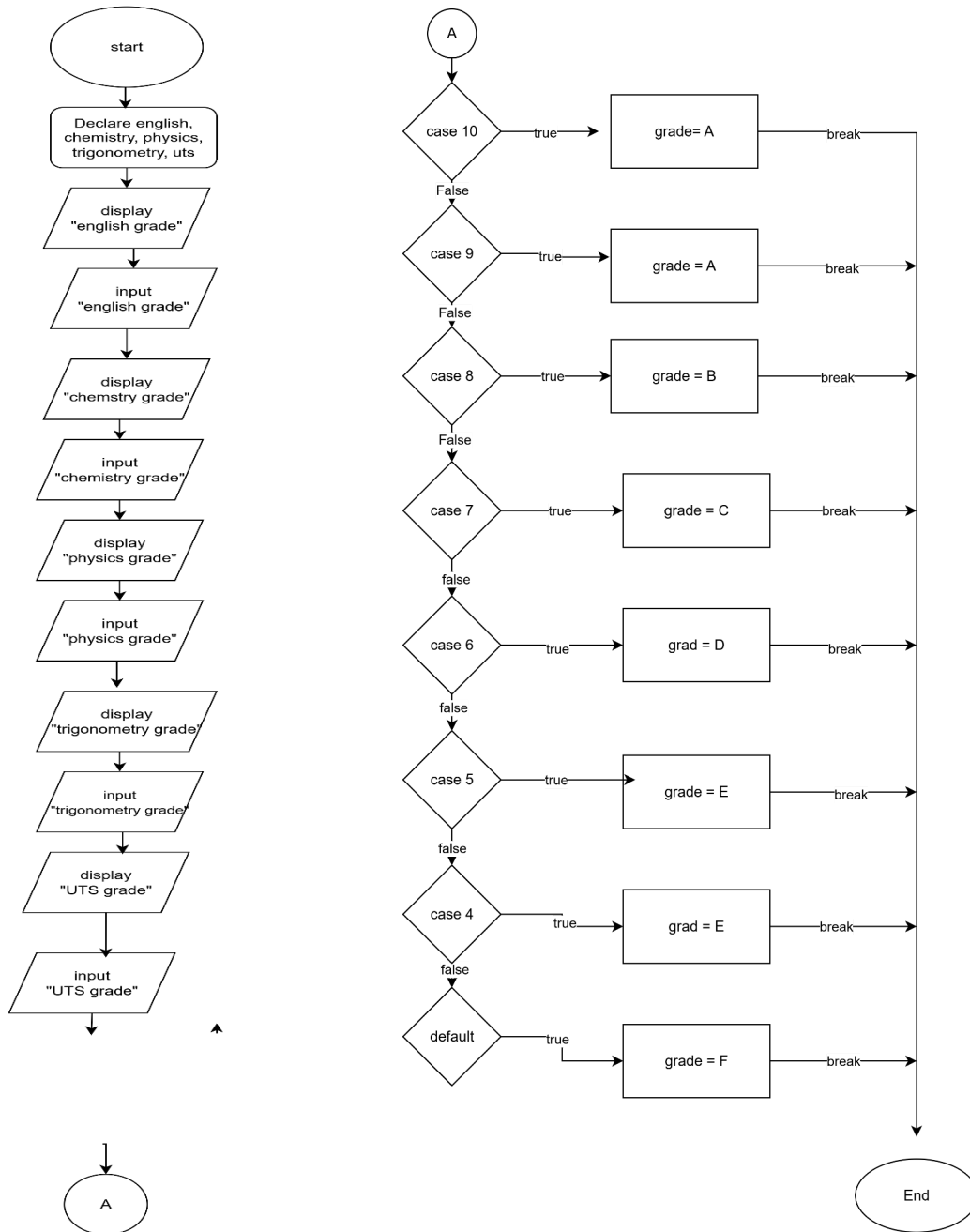
Display "Average is: ", average

Display "Grade Level: "
Switch (average / 10)
 Case 10 or 9: Display "A"
 Case 8: Display "B"
 Case 7: Display "C"
 Case 6: Display "D"
 Case 5: Display "E"
 Case 4: Display "F"

Default: Display "F"
End Switch

End

FLOWCHART:



7. Supplementary Activity

8. Conclusion

In this activity the learning about arrays and grade programs become more clear. The pseudocode helps me to show the steps in simple words on how the program works, like inputting the grades of English, Chemistry, Physics, Trigonometry and UTS, then computing the average and deciding the grade. The flowchart also makes it easier to understand because it shows the program flow step by step using shapes and arrows. By doing the pseudocode and flowchart together, it helps to see how the code is designed before writing it in C++. This activity gives a better understanding of logic, condition, and how to connect input, process, and output in programming.

9. Assessment Rubric

Rubric for SO 7 (7)

Criteria	Ratings						Pts
SO 7 PI 1 ILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Educational interests and pursuits exist and flourish outside classroom requirements, knowledge and/or experiences are pursued independently and applies knowledge learned into practice	5 pts Good Educational interests and pursuits exist and flourish outside classroom requirements, knowledge and/or experiences are pursued independently	4 pts Satisfactory Look beyond classroom requirements, showing interest in pursuing knowledge independently	3 pts Unsatisfactory Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently	2 pts Poor Relies on classroom instruction only	1 pts Very Poor No initiative or interest in acquiring new knowledge	6 pts
SO 7 PI 2 ILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Completes an assigned task independently and practices continuous improvement	5 pts Good Completes an assigned task without supervision or guidance	4 pts Satisfactory Requires minimal guidance to complete an assigned task	3 pts Unsatisfactory Requires detailed or step-by-step instructions to complete a task	2 pts Poor Shows little interest to complete a task independently	1 pts Very Poor No interest to complete a task independently	6 pts
SO 7 PI 3 ILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good Evaluate information from a variety of sources; formulates a clear and precise perspective.	4 pts Satisfactory Analyze information from a variety of sources; formulates a clear and precise perspective.	3 pts Unsatisfactory Apply the gathered information to formulate the problem	2 pts Poor Gather and summarized the information from a variety of sources but failed to formulate the problem	1 pts Very Poor Gather information from a variety of sources	6 pts
SO 7 PI 4 ILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	5 pts Good Ideas are creative and adapt the new knowledge to solve a problem or address an issue	4 pts Satisfactory Ideas are creative in solving a problem, or address an issue	3 pts Unsatisfactory Shows some creative ways to solve the problem	2 pts Poor Shows initiative and attempt to develop creative ideas to solve the problem	1 pts Very Poor Ideas are copied or restated from the sources consulted	6 pts