

DIGITAL ASSIGNMENT 2

NAME: S. GOWTHAM

REG.NO: 22BCE1906

QUESTION:

An international school of class 7 with a class strength of 25, decided to assign additional marks for their students in Maths subject, to increase their class average. The additional marks were given to each student based on their month of birth. That is she was to give that number (month of birth) as the booster marks. The teacher wants to find the class average for the original marks as well as for the revised marks. She 10 marks wants to decide whether to implement this revision in marks or not based on the significant improvement in the class average. Write a C program to help the teacher get the class average for the original marks as well as the revised marks. She wants to know whether to implement this revision or not. This is decided based on the condition that the revision should bring a significant increase in the class average of 5 marks. Else, she is not planning to implement this revision in the marks strategy. Write the program to display this decision of “Can implement – Significant increase in class average” or “Need not implement – No significant increase in class average”. Keep every operation in this program separate. Get the students’ original marks and the month of their birth as input

Answer:

```
#include <stdio.h>
#define CLASS_SIZE 25
int main() {
    int marks[CLASS_SIZE], birth_month[CLASS_SIZE];
    int i, sum_original = 0, sum_revised = 0;
    float avg_original, avg_revised;
    printf("Enter the original marks and birth months of
the students:\n");
    for (i = 0; i < CLASS_SIZE; i++) {
        scanf("%d %d", &marks[i], &birth_month[i]);
    }
    for (i = 0; i < CLASS_SIZE; i++) {
        sum_original += marks[i];
    }
    avg_original = (float)sum_original / CLASS_SIZE;
    for (i = 0; i < CLASS_SIZE; i++) {
        marks[i] += birth_month[i];
        sum_revised += marks[i];
    }
    avg_revised = (float)sum_revised / CLASS_SIZE;
    if (avg_revised - avg_original >= 5) {
        printf("Can implement - Significant increase in
class average\n");
    } else {
        printf("Need not implement - No significant
increase in class average\n");
    }
    return 0;
}
```