

Practical 5.

Aim: Write and execute two programs using do-while loop

Theory:

Do-while loop:

Unlike for and while loop, which test the loop condition at the top of the loop, the do...while loop in C programming checks its condition at the bottom of the loop.

Syntax: do {
 statement(s)
 } while (condition);

Code:

1) To find the greatest common divisor (gcd) of two non-negative integer value.

→ #include <stdio.h>

#include <conio.h>

int main() {

 int i, n1, n2, gcd;

 printf("Enter the two numbers : ");

 scanf("%d %d", &n1, &n2);

 i = 1;

 do {

 if (n1 % i == 0 && n2 % i == 0) {

 gcd = i; }

 i++ }

 while (i < n1 && i < n2);

 printf("gcd = %d", gcd);

 return 0;

}

2. To find the average of 'n' numbers.

→ #include <stdio.h>

int main() {

int, i=0, n, sum;

float avg;

printf("The total number of values : ");

scanf("%d", &n);

int arr[n];

do {

printf("Enter element no %d : ", i+1);

scanf("%d", &arr[i]);

sum += arr[i];

i++;

}

while (i < n);

avg = (float) sum/n;

printf("The average = %.2f", avg);

return 0;

}

Conclusion: Hence, I wrote and executed two programs using do-while loop.