**PF Lab no. 7**

**University of Central Punjab**

**Faculty of Information Technology**

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**Section: B12**

* **Task no. 1: -**

**Find the greater number among three Numbers using function:**

**#include<iostream>**

**using namespace std;**

**// Function to find the Greatest Number**

**int find\_greater(int a, int b, int c) {**

**int great;**

**if (a > b && a > c) {**

**return a;**

**}**

**else if (b > a && b > c) {**

**return b;**

**}**

**else if (c > b && c > a) {**

**return c;**

**}**

**else {**

**return 0;**

**}**

**}**

**int main()**

**{**

**// Declaring variables**

**int n1, n2, n3,greater;**

**// Taking input from user**

**cout << "Enter 1st Number: ";**

**cin >> n1;**

**cout << "Enter 2nd Number: ";**

**cin >> n2;**

**cout << "Enter 3rd Number: ";**

**cin >> n3;**

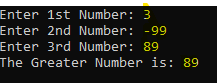
**// Calling function which return the greatest no.**

**greater = find\_greater(n1, n2, n3);**

**cout << "The Greater Number is: " << greater << endl;**

**return 0;**

**}**

**Output:**

* **Task no. 2: -**

**Find Average using function:**

**#include <iostream>**

**using namespace std;**

**// Function to calculate average and return the result**

**float average(float a, float b, float c) {**

**float avg;**

**avg = (a + b + c) / 3;**

**return avg;**

**}**

**int main()**

**{**

**// Declaring Variables**

**float n1, n2, n3, result;**

**// Taking input from user**

**cout << "Enter the 1st Value: ";**

**cin >> n1;**

**cout << "Enter the 2nd Value: ";**

**cin >> n2;**

**cout << "Enter the 3rd Value: ";**

**cin >> n3;**

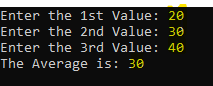
**// Calling average function**

**result = average(n1, n2, n3);**

**cout << "The Average is: " << result << endl;**

**return 0;**

**}**

**Output:**

* **Task no. 3: -**

**Find Max Number through a Function: -**

**#include <iostream>**

**using namespace std;**

**// Function to calculate max number**

**int max(int a, int b) {**

**if (a > b) {**

**return a;**

**}**

**else if (b > a) {**

**return b;**

**}**

**else {**

**return 0;**

**}**

**}**

**int main()**

**{**

**int n1, n2,max\_no;**

**// Taking input from user of two integers**

**cout << "Enter First No. : ";**

**cin >> n1;**

**cout << "Enter Second No. :";**

**cin >> n2;**

**// Calling the max function which initialize the max\_no variable**

**max\_no = max(n1, n2);**

**cout << "Max Number is: " << max\_no << endl;**

**return 0;**

**}**

**Output: -**



* **Task no. 4: -**

**Swap the values of two integer variables by a Function: -**

**#include <iostream>**

**using namespace std;**

**// Function for swapping**

**void swap(int& a, int& b) {**

**int temp = a;**

**a = b;**

**b = temp;**

**}**

**int main()**

**{**

**int n1, n2;**

**// Taking input from user**

**cout << "Enter First No. : ";**

**cin >> n1;**

**cout << "Enter Second No. : ";**

**cin >> n2;**

**// Calling function to swap the values**

**swap(n1, n2);**

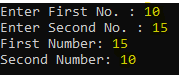
**// Printing the swapped values of both integers**

**cout << "First Number: " << n1<<endl;**

**cout << "Second Number: " << n2<<endl;**

**return 0;**

**}**

**Output: -**

* **Task no. 5: -**

**Declare and output the values of pointer: -**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**// Declaring the input variable and getting input**

**int x;**

**cout << "Enter the Value of x: ";**

**cin >> x;**

**// Initializing the ptr variable**

**int\* ptr = &x;**

**// Printing the values of x and ptr**

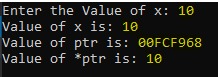
**cout << "Value of x is: " << x << endl;**

**cout << "Value of ptr is: " << ptr << endl;**

**cout << "Value of \*ptr is: " << \*ptr << endl;**

**return 0;**

**}**

**Output: -**

* **Task no. 6: -**

**Declare and output the values of pointer: -**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**// Declaring variables and getting input from user**

**int n1,n2;**

**cout << "Enter the 1st Number: ";**

**cin >> n1;**

**cout << "Enter the 2nd Number: ";**

**cin >> n2;**

**// Initializing the pointers with address of both integers**

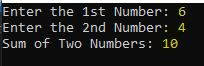
**int\* ptr1 = &n1, \* ptr2 = &n2;**

**// Printing the sum of two integers with pointers**

**cout << "Sum of Two Numbers: " << \*ptr1 + \*ptr2 << endl;**

**return 0;**

**}**

**Output: -**