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CS-114 Fundamentals of Programming (2+1)

DE-41 EE Semester 1

Fall 2019

**LAB REPORT # 09**

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**Task 1:**

Write a program that accepts five integer values in array using pointers.

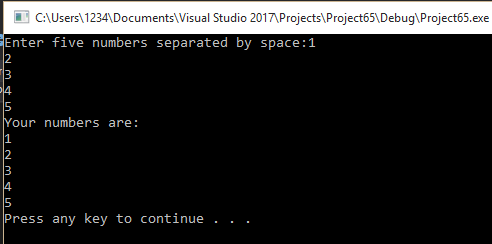
**Code:**

#include<iostream>  
  
  
using namespace std;  
  
   int main()  
    {  
     int arr[5],i;  
     int \*p=arr;  
     cout<<"Enter five numbers separated by space:";  
     cin>>\*p>>\*(p+1)>>\*(p+2)>>\*(p+3)>>\*(p+4);  
     cout<<"Your numbers are:\n";  
     for(i=0;i<5;i++)  
       {

cout<<arr[i]<<endl;  
}

system(“pause”);   
     return 0;  
  
    }

**Output:**

****

**Task 2:**

1. Write a program to sort an array of ten integer values in ascending order.

**Code:**

#include<iostream>

using namespace std;

int main()

{

int arr[10];

int \*ptr;

int temp;

for (int i = 0; i < 10; i++)

{

cin >> arr[i];

}

for (int i = 0;i < 10;i++)

{

for (int j = i + 1;j < 10;j++)

{

if (arr[i] > arr[j])

{

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

ptr = arr;

cout << "{ ";

for (int i = 0;i < 10;i++)

{

cout << \*(ptr + i) << ", ";

}

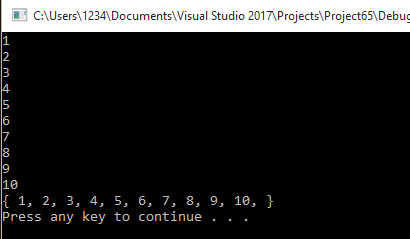
cout << "}" << endl;

system("pause");

return 0;

}

**Output:**

****

**Task 3:**

1. Write a C++ program that swap elements using call by reference.

**Code:**

#include<iostream>

using namespace std;

void swapping(int\*, int\*);

int main()

{

int a;

int b;

cout << "enter first number : ";

cin >> a;

cout << "enter second number : ";

cin >> b;

cout << "before swapping number 1 was : " << a << endl;

cout << "before swapping number 2 was : " << b << endl;

cout << "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" << endl;

swapping(&a, &b);

cout << "after swapping number 1 was : " << a << endl;

cout << "after swapping number 2 was : " << b << endl;

system("pause");

return 0;

}

void swapping(int\*ptr, int\*ptr2)

{

int temp;

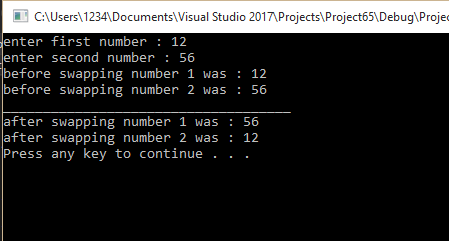
temp = \*ptr;

\*ptr = \*ptr2;

\*ptr2 = temp;

}

**Output:**

****

**Task 4:**

1. Write a C++ program to find maximum number between two numbers using a pointer.

**Code:**

/\*#include<iostream>

using namespace std;

int main()

{

int num1, num2;

int\*ptr1;

int \*ptr2;

ptr1 = &num1;

ptr2 = &num2;

cout << "enter 2 number : ";

cin >> num1;

cin >> num2;

if (\*ptr1 > \*ptr2)

{

cout << num1 << " is maximum.";

}

else if (\*ptr2 > \*ptr1)

{

cout << num2 << "is maximum.";

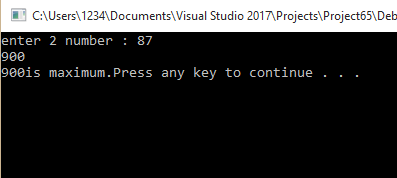
}

system("pause");

return 0;

}

**Output:**

****

**Task 5:**

1. Write a C++ program to convert kilograms into grams by passing pointers as arguments to function.

**Code:**

#include <iostream>

using namespace std;

double convert(double\* kilograms);

int main()

{

double kilograms;

cout << "Enter kilograms: ";

cin >> kilograms;

cout << kilograms << " kilogram(s) = " << convert(&kilograms) << " gram(s).\n";

system("pause");

return 0;

}

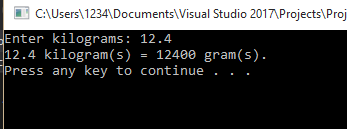
double convert(double\* kilograms)

{

return \*kilograms \* 1000;

}

**Output:**

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