DAY 17\_18

1. Write a program in C to enter marks of 10 students and print their marks. Find highest marks. (Hint : Use array)

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,a[50],max=0;

clrscr();

printf("\n\n\t Enter size of array =>");

scanf("%d",&n);

for(i=0; i<n; i++)

{

printf("\n\t Enter Marks stu %d =>",i+1);

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

}

for(i=0; i<n; i++)

{

if ( a[i] > max )

{

max = a[i];

}

}

printf("\n\n\t Hightest Marks of Student is => %d",max);

getch();

}

OUTPUT:

Enter size of array =>5

Enter Marks stu 1 =>10

Enter Marks stu 2 =>50

Enter Marks stu 3 =>60

Enter Marks stu 4 =>30

Enter Marks stu 5 =>20

Hightest Marks of Student is => 60

2. Create an array (marks) of 10 elements. Assign initial value between 0 to 100 to each element. Write a

code to perform summation of array elements of given range. User will give the range. For example:

Enter Starting range (0 is first element) : 3

Enter Ending range (9 is the last element) : 6

#include<stdio.h>

#include<conio.h>

void main()

{

int i,a[10],n,st,ed,sum=0;

clrscr();

printf("\n\n\t Enter size of array =>");

scanf("%d",&n);

for(i=0; i<n; i++)

{

printf("\n\n\t Enter Marks of Student %d Between [0-100] =>",i+1);

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

}

printf("\n\n\t Enter starting point =>");

scanf("%d",&st);

printf("\n\n\t Enter ending point =>");

scanf("%d",&ed);

for(i=st; i<=ed; i++)

{

printf("\n\n\t [%d] => %d",i,a[i]);

sum = sum+1;

}

printf("\n\n\t Sum is => %d",sum);

getch();

}

OUTPUT:

Enter size of array =>5

Enter Marks of Student 1 Between [0-100] =>50

Enter Marks of Student 2 Between [0-100] =>60

Enter Marks of Student 3 Between [0-100] =>50

Enter Marks of Student 4 Between [0-100] =>40

Enter Marks of Student 5 Between [0-100] =>60

Enter starting point =>1

Enter ending point =>4

[1] => 60

[2] => 50

[3] => 40

[4] => 60

Sum is => 4

3. Create three arrays (subject1\_marks, subject2\_ marks &amp; total\_marks) of 10 elements (10 students.

Student ith refers as (i+1) index in the array) each. Initialize each element of subject1\_marks and

subject2\_marks to any value between (0 to 100). Each element of total\_marks must be initialized to 0.

Calculation of total\_marks of ith student must be done as addition of subject1\_marks and

subject2\_marks of ith index. Print the table with No &amp; total marks as follows:

Student No Total Marks (Out of 200)

1 123

2 90

3 110

10 180

#include<stdio.h>

#include<conio.h>

#define SIZE 60

void main()

{

int i,n;

int sub1[SIZE],sub2[SIZE],total[SIZE];

clrscr();

printf("\n\n\t Enter how many values u want =>");

scanf("%d",&n);

// read

for(i=0; i<n; i++)

{

printf("\n\n\t Enter Marks of RollNo %d Test-1 ==> ",i+1);

scanf("%d",&sub1[i]);

printf("\n\n\t Enter Marks of RollNo %d Test-2 ==> ",i+1);

scanf("%d",&sub2[i]);

total[i] = sub1[i] + sub2[i];

}

clrscr();

printf("\n\n\t Roll No \tMarks-1\tMarks-2\tTotal");

printf("\n\t\t-------------------------------------");

for(i=0; i<n; i++)

{

printf("\n\n\t\t%d\t%d\t%d\t%d",i+1,sub1[i],sub2[i],total[i]);

}

getch();

}

OUTPUT:

Enter how many values u want =>3

Enter Marks of RollNo 1 Test-1 ==> 10

Enter Marks of RollNo 1 Test-2 ==> 50

Enter Marks of RollNo 2 Test-1 ==> 20

Enter Marks of RollNo 2 Test-2 ==> 60

Enter Marks of RollNo 3 Test-1 ==> 40

Enter Marks of RollNo 3 Test-2 ==> 80

Roll No Marks-1 Marks-2 Total

--------------------------------------------------

1 10 50 60

2 20 60 80

3 40 80 120

4. Write a program to perform bubble sort using 1-D Array of 6 elements. Initialize each element with

value between 0 to 100.

Hint: Bubble Sort is the sorting algorithm that works by repeatedly swapping the adjacent elements if

they are in wrong order.)

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,j,a[20],tmp=0;

clrscr();

printf("\n\n\t Enter Size of Array =>");

scanf("%d",&n);

for(i=0; i<n; i++)

{

printf("\n\n\t Enter Number of %d =>",i);

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

}

printf("\n\n\t Before shorting array ");

for(i=0; i<n; i++)

{

printf(" %d",a[i]);

}

for(i=0; i<n; i++)

{

for(j= i+1; j<n; j++)

{

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

{

tmp = a[i];

a[i] = a[j];

a[j] = tmp;

}

}

}

printf("\n\n\t After shorting Array ");

for(i=0; i<n; i++)

{

printf(" %d ",a[i]);

}

getch();

}

OUTPUT:  
Enter Size of Array =>5

Enter Number of 0 =>20

3Enter Number of 1 =>0

4Enter Number of 2 =>22

Enter Number of 3 =>5

Enter Number of 4 =>2

Before shorting array 20 0 22 5 2

After shorting Array 0 2 5 20 22