DSTL LAB-2

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E-316

1. Write a program in C to create two sets and perform the Difference operation on sets.

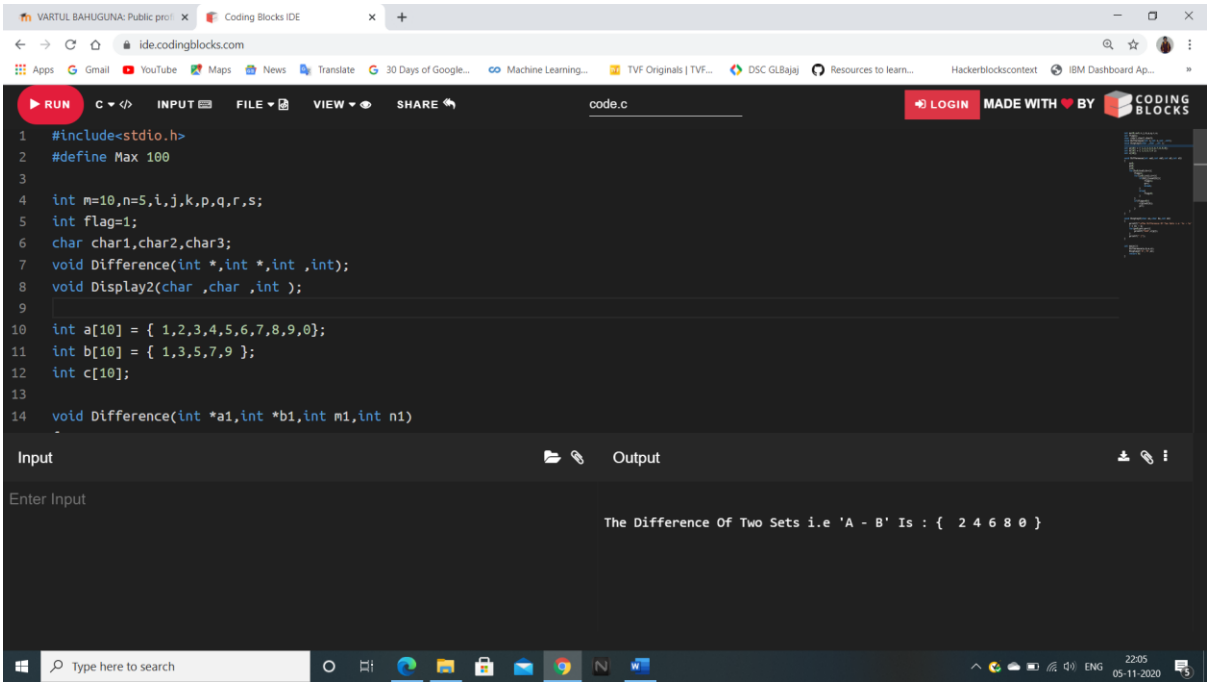
   ANS.

   INPUT:-

```c
#include<stdio.h>
#define Max 100

int m=10,n=5,i,j,k,p,q,r,s;
int flag=1;
char char1,char2,char3;
void Difference(int *,int *,int ,int);
void Display2(char ,char ,int );

int a[10] = { 1,2,3,4,5,6,7,8,9,0};
int b[10] = { 1,3,5,7,9 };
int c[10];

void Difference(int *a1,int *b1,int m1,int n1)
{
    q=0;
    p=0;
    i=0;
    for(k=0;k<m1;k++){
```

```
        flag=1;
        for(j=0;j<n1;j++){
            if(b1[j]==a1[k]){
                flag=1;
                q++;
                break;
            }
            else{
                flag=0;
            }
        }
        if(flag==0){
            c[p]=a1[k];
            p++;
        }
    }
}

void Display2(char ac,char bc,int m1)
{
    printf("\nThe Difference Of Two Sets i.e '%c - %c' Is : { ",ac,b
c);
    r = m1 - q;
    for(p=0;p<r;p++){
        printf("%2d",c[p]);
    }
    printf(" }");
}


int main(){
    Difference(a,b,m,n);
    Display2('A','B',m);
    return 0;
}
```

OUTPUT:-


VARTUL BAHUGUNA: Public prof
Coding Blocks IDE
ide.codingblocks.com
Apps Gmail YouTube Maps News Translate 30 Days of Google... Machine Learning... TVF Originals | TVF... DSC GLBajaj Resources to learn... Hackerblockscontext IBM Dashboard Ap...
RUN C INPUT FILE VIEW SHARE
code.c
LOGIN MADE WITH BY CODING BLOCKS
#include<stdio.h>
#define Max 100
int m=10,n=5,i,j,k,p,q,r,s;
int flag=1;
char char1,char2,char3;
void Difference(int *,int *,int ,int);
void Display2(char ,char ,int);
int a[10] = { 1,2,3,4,5,6,7,8,9,0};
int b[10] = { 1,3,5,7,9 };
int c[10];
void Difference(int *a1,int *b1,int m1,int n1)
Input
Output
Enter Input
The Difference Of Two Sets i.e 'A - B' Is : { 2 4 6 8 0 }
Type here to search
ENG
22:05
05-11-2020

2. Write a program in C to create two sets and perform the Symmetric Difference operation

ANS.

INPUT:-

```c
#include<stdio.h>
void symmDiff(int arr1[], int arr2[], int n, int m)
{
    int i = 0, j = 0;
    while (i < n && j < m)
    {
        if (arr1[i] < arr2[j])
        {
            printf("%d ",arr1[i]);
            i++;
        }
        else if (arr2[j] < arr1[i])
        {
            printf("%d ",arr2[j]);
            j++;
        }
        else
        {
            i++;
            j++;
        }
    }
}

int main()
{
    int arr1[] = {2, 4, 5, 7, 8, 10, 12, 15};
    int arr2[] = {5, 8, 11, 12, 14, 15};
    int n = sizeof(arr1)/sizeof(arr1[0]);
    int m = sizeof(arr2)/sizeof(arr2[0]);
```

```
    symmDiff(arr1, arr2, n, m);
    return 0;
}
```

OUTPUT:-