**Discrete Structures**

**Practical File**

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Roll Number: 33

**Q1) Insertion of an element into an array.**

**Code:**

#include <stdio.h>

void insertInArray(int[],int&,int,int);

int main() {

int arr[15];

int size;

int el;

int pos;

int i;

printf("Enter the size of the array(max 14): ");

scanf("%d",&size);

printf("Enter the array:\n");

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

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

printf("Enter the element to insert: ");

scanf("%d",&el);

printf("Enter the index to insert element at: ");

scanf("%d",&pos);

insertInArray(arr,size,el,pos);

printf("\nElement inserted successfully. New array:\n");

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

{

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

}

return 0;

}

void insertInArray(int arr[], int &size, int el, int pos)

{

int i=0;

for(i=size; i>pos;--i)

{

arr[i] = arr[i-1];

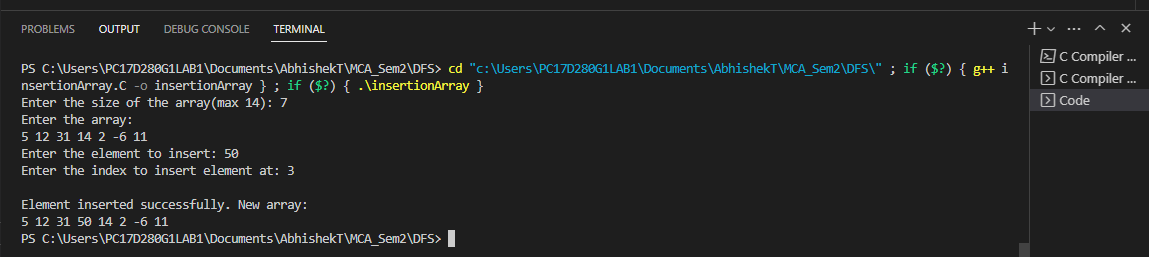
}

arr[pos]= el;

size++;

}

**Output:**

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