

# PROGRAM

```
#include<stdio.h>
#include<conio.h>
#define SIZE 10
void push(int);
void pop();
void display();
int stack[SIZE], top = -1;
void main()
{
    int value, choice;
    clrscr();
    while(1){
        printf("\n\n***** MENU *****\n");
        printf("1. Push\n2. Pop\n3. Display\n4. Exit");
        printf("\nEnter your choice: ");
        scanf("%d",&choice);
        switch(choice){
            case 1: printf("Enter the value to be insert: ");
                    scanf("%d",&value);
                    push(value);
                    break;
            case 2: pop();
                    break;
            case 3: display();
                    break;
```

```
        case 4: exit(0);
        default: printf("\nWrong selection!!! Try again!!!");
    }
}
}

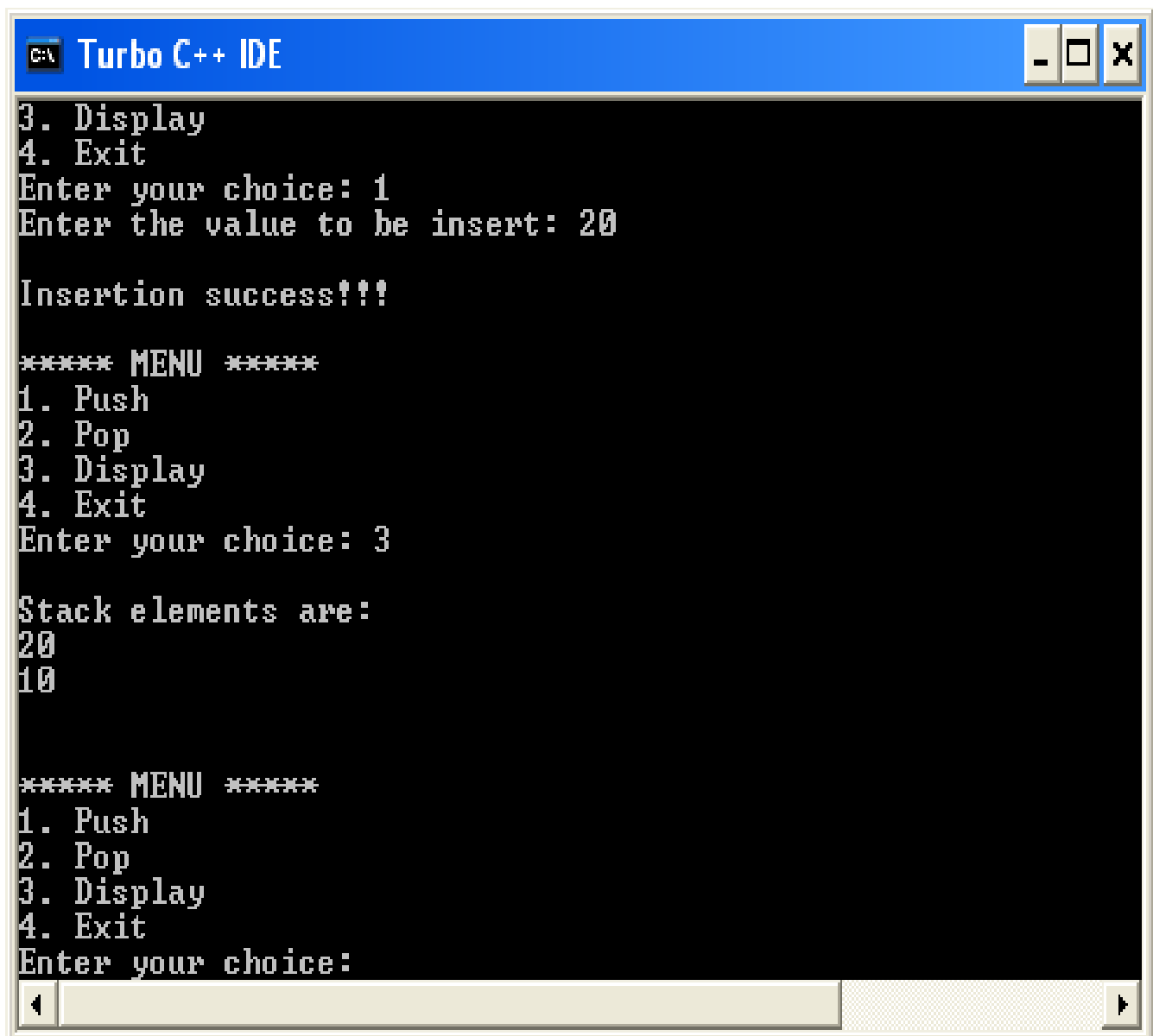
void push(int value){
    if(top == SIZE-1)
        printf("\nStack is Full!!! Insertion is not possible!!!");
    else{
        top++;
        stack[top] = value;
        printf("\nInsertion success!!!");
    }
}

void pop(){
    if(top == -1)
        printf("\nStack is Empty!!! Deletion is not possible!!!");
    else{
        printf("\nDeleted : %d", stack[top]);
        top--;
    }
}

void display(){
    if(top == -1)
        printf("\nStack is Empty!!!");
```

```
    else{  
        int i;  
        printf("\nStack elements are:\n");  
        for(i=top; i>=0; i--)  
            printf("%d\n",stack[i]);  
    }  
}
```

## OUTPUT:



```
Turbo C++ IDE  
3. Display  
4. Exit  
Enter your choice: 1  
Enter the value to be insert: 20  
  
Insertion success!!!  
  
***** MENU *****  
1. Push  
2. Pop  
3. Display  
4. Exit  
Enter your choice: 3  
  
Stack elements are:  
20  
10  
  
***** MENU *****  
1. Push  
2. Pop  
3. Display  
4. Exit  
Enter your choice:
```