stack

```c
#include <stdio.h>

int stack[100], choice, n, top, x, i;

void push(void);

void pop(void);

void display(void);

int main()

{ //clrscr();

    top = -1;

    printf("\n Enter the size of STACK[MAX=100]:");

    scanf("%d", &n);

    printf("\n\t STACK OPERATIONS USING ARRAY");

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

    printf("\n\t 1.PUSH\n\t 2.POP\n\t 3.DISPLAY\n\t 4.EXIT");

    do

    {

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

        scanf("%d", &choice);

        switch (choice)

        {

        case 1:
```

```c
{
    push();
    break;
}
case 2:
{
    pop();
    break;
}
case 3:
{
    display();
    break;
}
case 4:
{
    printf("\n\t EXIT POINT");
    break;
}
default:
{
```

```c
            printf("\n\t Please enter a valid choice(1/2/3/4);");

        }

        }

    } while (choice != 4);

    return 0;

}

void push()

{

    if (top >= n - 1)

    {

        printf("\n\t SRACK is over flow");

    }

    else

    {

        printf("Enter a value to be pushed:");

        scanf("%d", &x);

        top++;

        stack[top] = x;

    }

}

void pop()
```

```c
{
    if (top <= -1)
    {
        printf("\n\t Stack is under flow");
    }
    else
    {
        printf("\n\t The popped elements is %d", stack[top]);
        top--;
    }
}
void display()
{
    if (top >= 0)
    {
        printf("\n The elements in STACK\n");
        for (i = top; i >= 0; i--)
            printf("\n%d", stack[i]);
        printf("\nPress next choice");
    }
    else
```

```c
    {
        printf("\n The STACK is empty");
    }
}
```