**SINGLE STACK FUNCTIONS**

**#include <stdio.h>**

**#include <malloc.h>**

**#define max 10**

**int stackArray[max];**

**int top;**

**int push(int x)**

**{**

**if (top == max-1)**

**{**

**printf("stack is full");**

**return 0;**

**}**

**top++;**

**stackArray[top]=x;**

**printf("%d is pushed",x);**

**return 1;**

**}**

**int pop(int x)**

**{**

**if (top==-1)**

**{**

**printf("stack is empty");**

**return 0;**

**}**

**printf("%d has been popped out",x);**

**top--;//removing the access from user.**

**return 1**

**}**

**void peep()**

**{**

**if (top==-1)**

**{**

**printf("stack is empty");**

**return 0;**

**}**

**else printf("%d is on the top",stackArray[top]);**

**}**

**void traverse()**

**{**

**int i;**

**if (top==-1)**

**{**

**printf("stack is full");**

**}**

**else**

**for (i=top;i>=0;top--)**

**printf("%d\t",stackArray[top]);**

**}**