

```

1) #include <stdio.h>
#include <stdlib.h>
int size;
int arr[25];
int top = 1;
int item;
void push();
int pop();
void display();
int main()
{
    int item-del;
    int ch;
    printf("Enter size of stack\n");
    scanf("%d", &size);
    for (j;
    {
        printf("\n 1. push\n 2. pop\n 3. display\n 4.
        exit\n");
        fflush(stdin);
        scanf("%d", &ch);
        switch (ch)
        {
            case 1: push();
            break;
            case 2: item-del = pop();
            if (item-del == -1)
            printf("Item deleted :- d\n", item-del);
            break;

```

```
case 3: display();
```

```
break;
```

```
case 0: exit(0);
```

```
break;
```

```
default: printf("invalid choice\n");
```

```
{
```

```
}
```

```
return 0;
```

```
}
```

```
void push
```

```
{
```

```
if (top == size - 1)
```

```
{
```

```
printf("stack is filled\n");
```

```
return;
```

```
}
```

```
printf("Enter item to be inserted in stack\n");
```

```
fflush(stdin);
```

```
scanf("%d", &item)
```

```
top++
```

```
arr[top] = item
```

```
}
```

```
int pop()
```

```
{
```

```
if (top == -1)
```

```
{
```

```
return -1;
```

```
}
```

```
else
```

```
}
```

```
return arr[top--];
```

```
}
```

```
}
```

```
void display ()
```

```
{
```

```
    int i;
```

```
    if (top == -1)
```

```
{
```

```
        printf("stack is empty \n");
```

```
    }
```

```
    else
```

```
        for (i = 0; i <= top; i++)
```

```
{
```

```
        printf("Element %d : %d\n", i+1, arr[i]);
```

```
    }
```

```
}
```