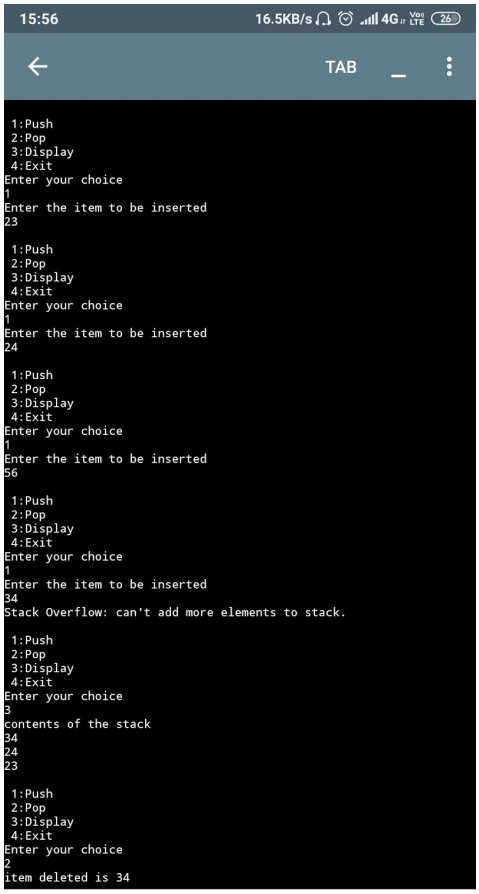
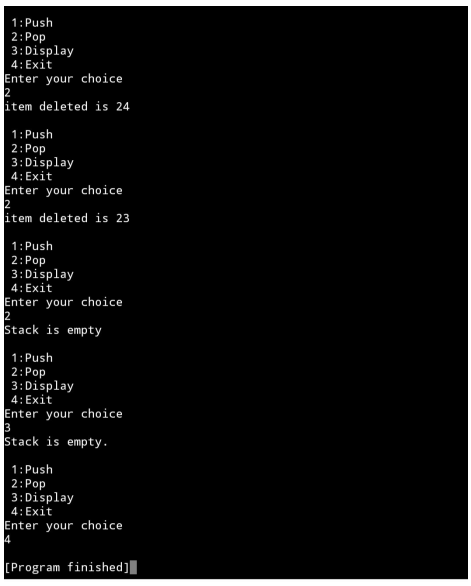
```
new*        new*
 1  #include<stdio.h>
 2  #include<stdlib.h>
 3  #define STACK_SIZE 3
 4  int top=-1, stack[STACK_SIZE];
 5  int s[2];
 6  int item;
 7  void push()
 8  {
 9     if(top==STACK_SIZE-1){
10        printf("Stack Overflow: can't add more
    elements to stack.\n");
11        return;
12     }
13     top=top+1;
14     s[top]=item;
15  }
16  int pop()
17  {if (top==-1)return -1;
18  return s[top--];
19  }void display()
20  {
21     int i;
22     if (top==-1)
23     {
24        printf("Stack is empty.\n");
25        return;
26     }printf("contents of the stack\n");
27     for(i=top;i>=0;i--){
28        printf("%d\n",s[i]);
29     }}
30     int main()
Tab |  {  |  }  |  :  |  ;  |  "  |
```

```
new*        new*
31     {
32     int item_deleted ;
33     int choice ;
34     for(;;)
35     {
36     printf("\n 1:Push \n 2:Pop \n 3:Display\n
    4:Exit\n");
37     printf("Enter your choice\n");
38     scanf("%d",&choice);
39     switch(choice)
40     {
41        case 1:printf("Enter the item to be
    inserted\n");
42        scanf("%d",&item);
43        push();
44        break;
45        case 2:item_deleted=pop();
46        if(item_deleted==-1)
47        printf("Stack is empty\n");
48        else
49        printf("item deleted is %d\n", item_deleted);

50        break;
51        case 3:display();
52        break;
53        case 4:exit(0);
54     }
55     }
56     }
|  '  |  #  |  <  |  >  |  (  |  )
```

Output:


15:56
16.5KB/s
TAB
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
1
Enter the item to be inserted
23
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
1
Enter the item to be inserted
24
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
1
Enter the item to be inserted
56
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
1
Enter the item to be inserted
34
Stack Overflow: can't add more elements to stack.
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
3
contents of the stack
34
24
23
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
2
item deleted is 34


1:Push
2:Pop
3:Display
4:Exit
Enter your choice
2
item deleted is 24
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
2
item deleted is 23
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
2
Stack is empty
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
3
Stack is empty.
1:Push
2:Pop
3:Display
4:Exit
Enter your choice
4
[Program finished]