

```

#include <stdio.h>
#include <stdlib.h>

typedef struct node{
    int data;
    struct node *link;
}node;

node *top=NULL;

void push()
{
    node *temp;
    temp=(node *)malloc(sizeof(node));
    printf("Enter node element\n");
    scanf("%d",&temp->data);
    temp->link=NULL;

    if(top==NULL)
    {
        top=temp;
    }
    else
    {
        temp->link=top;
        top=temp;
    }
}

void pop()
{
    node *temp;

    if(top==NULL)
    {
        printf("Stack is empty\n");
    }

    else
    {
        temp=top;
        top=temp->link;
        temp->link=NULL;
        free(temp);
    }
}

```

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}
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void display()
```

```
{
    node *temp=top;
    if(temp==NULL)
    {
        printf("Stack is empty\n");
    }
    else
    {
        while(temp!=NULL)
        {
            printf("%d\n",temp->data);
            temp=temp->link;
        }
    }
}
```

```
int main()
```

```
{

    int op,len;
    while(1)
    { printf("Enter the operation\n1.Push\n");
      printf("2.Pop\n3.Display\n4.Exit\n");
      scanf("%d",&op);
      switch (op)
      {
          case 1:push();
              break;
          case 2: pop();
              break;
          case 3: display();
              break;
          case 4: exit(0);
              break;
          default: printf("No such operation\n");
      }
    }
    return 0;
}
```

Ouput:

```
30
Enter the operation
1.Push
2.Pop
3.Display
4.Exit
3
30
20
10
Enter the operation
1.Push
2.Pop
3.Display
4.Exit
2
Enter the operation
1.Push
2.Pop
3.Display
4.Exit
3
20
10
```