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#include <iostream>
using namespace std;
struct Node {
   int data;
   struct Node *next;
};
struct Node* top = NULL;
void push(int val) {
   struct Node* newnode = (struct Node*) malloc(sizeof(struct Node));
  newnode->data = val;
  newnode->next = top;
   top = newnode;
void pop() {
   if (top==NULL)
   cout<<"Stack Underflow"<<endl;</pre>
      cout<<"The popped element is "<< top->data <<endl;</pre>
      top = top->next;
void display() {
   struct Node* ptr;
   if (top==NULL)
   cout<<"stack is empty";</pre>
   else {
      ptr = top;
      cout<<"Stack elements are: ";</pre>
      while (ptr != NULL) {
         cout<< ptr->data <<" ";
         ptr = ptr->next;
   cout << endl;
int main() {
   int ch, val;
```

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cout<<"1) Push in stack"<<endl;</pre>
cout<<"2) Pop from stack"<<endl;</pre>
cout<<"3) Display stack"<<endl;</pre>
cout<<"4) Exit"<<endl;</pre>
do {
   cout<<"Enter choice: "<<endl;</pre>
   cin>>ch;
   switch(ch) {
      case 1: {
          cout<<"Enter value to be pushed:"<<endl;</pre>
         cin>>val;
         push(val);
         break;
       case 2: {
         pop();
         break;
       }
       case 3: {
         display();
         break;
       }
       case 4: {
         cout<<"Exit"<<endl;
         break;
       default: {
          cout<<"Invalid Choice"<<endl;</pre>
       }
\} while (ch!=4);
return 0;
```