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DS LAB TEST-2

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```
struct Bill {
    char name[50];
    int cost;
    struct Bill *next;
};
struct Bill *head = NULL;

void push(int new_cost, char new_name[50]) {
    struct Bill *new_node = (struct Bill *) malloc(sizeof(struct Bill));
    strcpy(new_node -> name, new_name);
    new_node -> cost = new_cost;
    new_node -> next = NULL;
    if (head == NULL) {
        head = new_node;
    }
    else {
        new_node -> next = head;
        head = new_node;
    }
}
```

```
void pop() {
    struct Bill *temp = head;
    if (head == NULL) {
        printf("\n List is Empty.");
    }
    else {
        head = temp -> next;
        temp -> next = NULL;
        free(temp);
    }
}
```

```
void display() {
struct Bill *ptr = head;
if (head == NULL)
    printf("Empty list");
else { while (ptr != NULL){
    printf("\n%s", ptr -> name);
printf("\n%d", ptr -> cost);
ptr = ptr -> next;
} }
}
```

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```
#include <stdio.h> #include <stdlib.h>
                   #include <string.h>
int main() {
  int x;
  int data;
  char n[50];
  do {
     printf("---MENU---");
     printf("\n1. Push ");
     printf("\n2. Pop ");
     printf("\n3. Display ");
     printf("\n4. Exit ");
     printf("\n Choose your option: ");
     scanf("%d", &x);
     switch(x) {
       case 1: printf("\n Enter item name: ");
               gets(name);
               printf("\n Enter cost: ");
               scanf("%d", &data);
               push(data, name);
               break;
       case 2: pop();
               break;
       case 3: display();
               break;
       case 4: disp exit(0);
               break;
       default: printf("\n Invalid option. ");
     }
  } while(x>=1 && x<=4);
  return 0;
}
```

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