/\*Stack Implementation through Array\*/ #include #include int stack[5]; int top=-1; //index pointing to the top of stack void push() { int y; if((top+1) == 5) { printf("\nStack Full\n"); return; } else { printf("\n Enter Number"); scanf("%d",&y); top++; stack[top]=y; printf("\n%d added to Stack at %d Position\n",y,top); } void pop() { int a; if(top == -1) { printf("\nStack Empty\n"); } else { a=stack[top]; printf("\n %d deleted from stack from %d position",a,top); top--; } } void display() { int i; if(top==-1) { printf("\nStack Empty\n"); } else { printf("\n\n\contents of the stack are : \n"); for(i=top;i>=0;i--) { printf("\d", stack[i]); if(top == i) printf("\t<--- TOP\n"); else printf("\n"); } } void main() { int i,num,menuselect; clrscr(); printf("\n\t\tProgram for stack using array\n"); do { printf("\n\n\tMain Menu: \n1.Add element to stack\n2.Delete element from the stack\n3.Display Stack\n4.Exit"); printf("\nSelect menu : "); scanf("%d",&menuselect); switch(menuselect) { case 1 : push(); break; case 2 : pop(); break; case 3 : display(); break; case 4 : printf("\nExiting the program"); break; default: printf("Invalid menu item selected."); } while(menuselect != 4); }