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#include<stdio.h>
int stack[100],choice,n,top,x,i;
void push(void);
void pop(void);
void display(void);
int main()
{
    //clrscr();
    top=-1;
    printf("\n Enter the size of STACK[MAX=100]:");
    scanf("%d",&n);
    printf("\n\t STACK OPERATIONS USING ARRAY");
    printf("\n\t-----");
    printf("\n\t 1.PUSH\n\t 2.POP\n\t 3.DISPLAY\n\t 4.EXIT");
    do
    {
        printf("\n Enter the Choice:");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
            {
                push();
                break;
            }
            case 2:
            {
                pop();
                break;
            }
            case 3:
            {
                display();
                break;
            }
            case 4:
            {
                printf("\n\t EXIT POINT ");
            }
        }
    }
}

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        break;
    }
    default:
    {
        printf ("\n\t Please Enter a Valid Choice(1/2/3/4)");
    }
}
}
while(choice!=4);
return 0;
}
void push()
{
    if(top>=n-1)
    {
        printf("\n\tSTACK is over flow");
    }
    else
    {
        printf(" Enter a value to be pushed:");
        scanf("%d",&x);
        top++;
        stack[top]=x;
    }
}
void pop()
{
    if(top<=-1)
    {
        printf("\n\t Stack is under flow");
    }
    else
    {
        printf("\n\t The popped elements is %d",stack[top]);
        top--;
    }
}
}

```

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void display()
{
    if(top>=0)
    {
        printf("\n The elements in STACK \n");
        for(i=top; i>=0; i--)
            printf("\n%d",stack[i]);
        printf("\n Press Next Choice");
    }
    else
    {
        printf("\n The STACK is empty");
    }
}

```

STACK OPERATIONS USING ARRAY

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- 1.PUSH
 - 2.POP
 - 3.DISPLAY
 - 4.EXIT

Enter the Choice:1
Enter a value to be pushed:12

Enter the Choice:1
Enter a value to be pushed:24

Enter the Choice:1
Enter a value to be pushed:98

Enter the Choice:3

The elements in STACK

98
24
12

Press Next Choice
Enter the Choice:2

The popped elements is 98
Enter the Choice:3

The elements in STACK

24

12

Press Next Choice

Enter the Choice:4

EXIT POINT