Dinyashree.K
1BM19CS054

```
#include<stdio.h>
int stack[5],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=5]:");
    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\t4. EXIT");
    do
    {
        printf("\nEnter the choice:");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
            {
                push();
                break;
            }
            case 2:
            {
                pop();
                break;
            }
            case 3:
            {
                display();
                break;
            }
```

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```
case 4 :
{
  printf("\n\t EXIT POINT");
}
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\t STACK is over flow");
  }
  else
  {
     printf("Enter a value to be pushed:");
     scanf("%d", &x);
     top top ++;
     stack[top] = x;
  }
}
void pop ()
{
  if (top <=-1)
  {
     Printf("\n\t Stack is under flow");
  }
  else
```

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```
{
printf("\n\t the popped element is %d",
        stack [top]);
}
}
void display()
{
  if (top>=0)
  {
    printf("\n The element is 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");
  }
}
```

Scanned with CamScanner