```c
#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 ");
        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--;
  }
}
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");
  }

}
```

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stackusingarray.c > display()

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
ckusingarray }

 Enter the size of STACK[MAX=100]:4

          STACK OPERATIONS USING ARRAY
         ----------------------------------
          1.PUSH
          2.POP
          3.DISPLAY
          4.EXIT
 Enter the Choice:1
 Enter a value to be pushed:44

 Enter the Choice:1
 Enter a value to be pushed:46

 Enter the Choice:1
 Enter a value to be pushed:43

 Enter the Choice:1
 Enter a value to be pushed:5

 Enter the Choice:3

 The elements in STACK

5
43
46
44
 Press Next Choice
 Enter the Choice:1

         STACK is over flow
 Enter the Choice:2

          The popped elements is 5
 Enter the Choice:2

          The popped elements is 43
 Enter the Choice:2

          The popped elements is 46
 Enter the Choice:2

          The popped elements is 44
```