```c
include<stdio.h>
int stack[100],choice,n,top,x,i;
void push(void);
void pop(void);
void display(void);
int main()
{
    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)
    {
```

```c
        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");
    }

}
```

```
shiv sundar
enter your usn
enter marks for subject1:
90
enter credits for subject1:
4
enter marks for subject2:
90
enter credits for subject2:
3
enter marks for subject3:
89
enter credits for subject3:
3
enter marks for subject4:
100
enter credits for subject4:
1
enter marks for subject5:
80
enter credits for subject5:
4
enter marks for subject6:
99
enter credits for subject6:
4
enter marks for subject7:
76
enter credits for subject7:
2
enter marks for subject8:
90
enter credits for subject8:
3
enter marks for subject9:
87
enter credits for subject9:
3
name:shiv
usn:sundar
```