

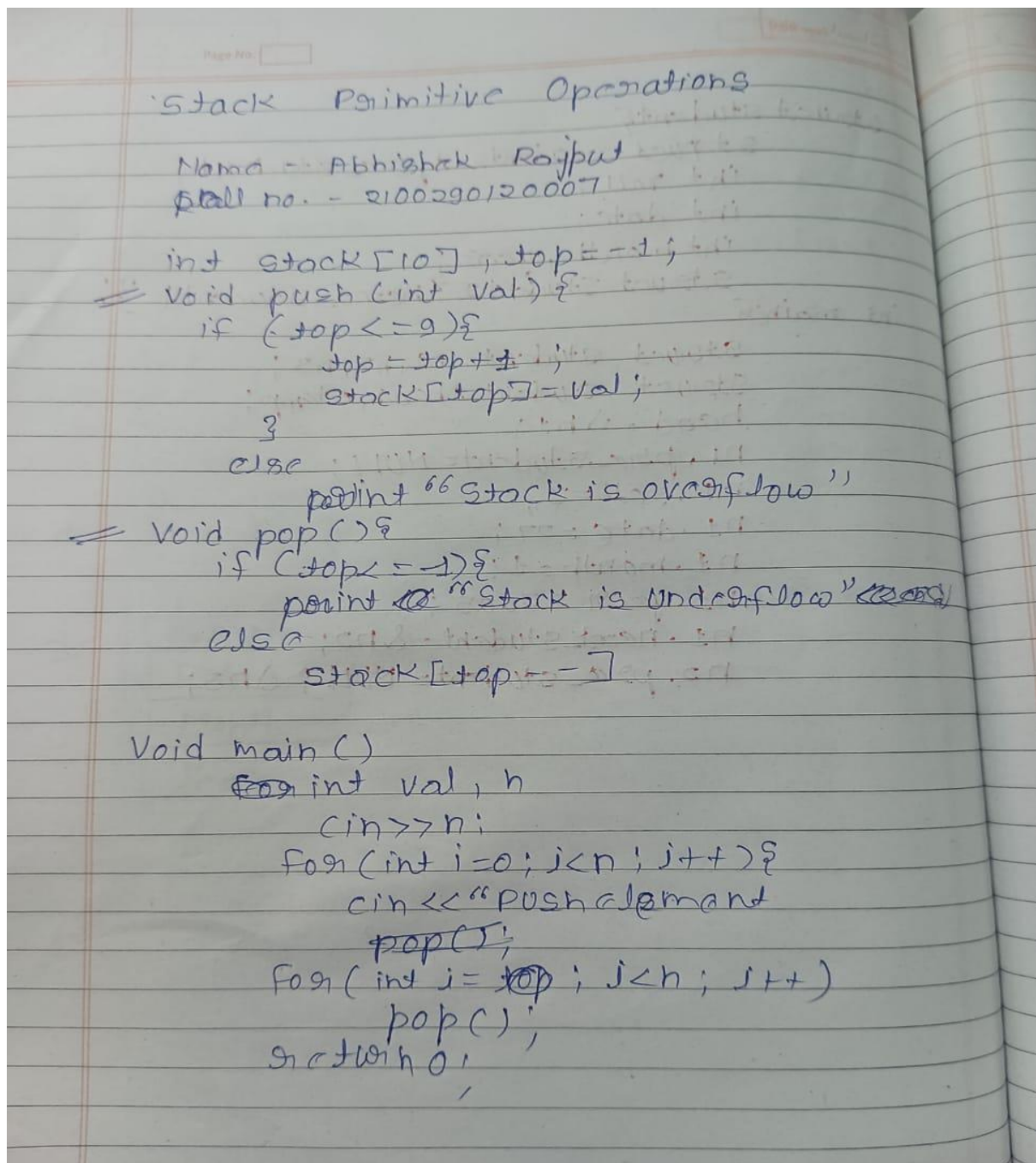
DS Lab KCS351 - A1

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LAB 9

Program for Stack Primitive Operations



Stack Primitive Operations

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```
int stack[10], top = -1;
// void push (int val) {
    if (top <= 9) {
        top = top + 1;
        stack[top] = val;
    }
    else
        printf("Stack is overflow")
// void pop () {
    if (top <= -1) {
        printf("Stack is underflow")
    }
    else
        stack[top] = -1;

void main ()
{
    int val, h;
    cin >> h;
    for (int i = 0; i < h; i++) {
        cin << "push element ";
        pop();
        for (int j = top; j < h; j++)
            pop();
        system("cls");
    }
}
```

```

1 //ABHISHEK RAJPUT
2 //2100290120007
3 #include <iostream>
4 using namespace std;
5 int stack[10],top=-1;
6 void push(int val){
7     if(top<=9){
8         top=top+1;
9         stack[top]=val;
10    }
11    else
12        cout<<"Stack is overflow"<<endl;
13 }
14 void pop( ){
15     if(top<=-1){
16         cout<<"Stack is underfow"<<endl;
17     }
18     else{
19         cout<<"Popped element is : "<<stack[top--]<<endl;
20     }
21 }
22 }

```

```

23 int main()
24 {
25     int val,n;
26     cout<<"Size of stack : ";
27     cin>>n;
28
29     for(int i=0;i<n;i++){
30         cin>>val;
31         push(val);
32     }
33     for(int i=0;i<n;i++)
34         cout<<"Push element is: "<<stack[i]<<endl;
35     for(int i=0;i<n;i++){
36         pop();
37     }
38     return 0;
39 }
40

```

OUTPUT

```
Size of stack : 5
1 2 3 4 5
Push element is: 1
Push element is: 2
Push element is: 3
Push element is: 4
Push element is: 5
Popped element is : 5
Popped element is : 4
Popped element is : 3
Popped element is : 2
Popped element is : 1

...Program finished with exit code 0
Press ENTER to exit console.
```