

Data Structure & Algorithm

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Q2:- convert expression into Prefix notation.

$$A + B * C / D - F + A \wedge E$$

Symb	Prefix	appstack
A	A	

1st Reverse the notation.

$$E \wedge A + F - D / C * B + A$$

Symb	Prefix	appstack
E	E	
A	E	A
A	EA	A
+	EA A	+
F	EA A F	+
-	EA A F	+ -
D	EA A F D	+ -
/	EA A F D	+ - /
C	EA A F D C	+ - /
*	EA A F D C	+ - / *

	E A \neg F D C B	+ - / *
B	E A \neg F D C B *	+ - +
+	E A \neg F D C B * / A	+ - +
A		

E A \neg F D C B * / A + - +
 again reverse it
 + - + A / * B C D F \neg A E

Q2: How to add an element in stack?

```
public void push (int i) {
    if (top == arr.length - 1)
    {
```

```
        System.out.println("overflow");
        System.exit(1);
    }
```

```
else {
```

```
    top++;
    arr[top] = i;
}
```