

1) Stack

Pseudocode

Void Push (int n)

```

{
    if (top == (size-1))
    {
        Printt("Overflow");
    }
    else {
        top++;
        Stack[top] = n;
    }
}

```

Void POP ()

```

{
    if (top == -1) {
        Printt("Underflow");
    }
    else {
        Printt("%d", Stack[top]);
        top--;
    }
}

```



```
void display()
```

```
{
```

```
if (top == -1) {
```

```
    printf("stack empty");
```

```
}
```

```
else {
```

```
    for (top; top >= 0; top--)
```

```
    {
```

```
        printf("%d", stack[top]);
```

```
    }
```

Output:

1. Push . 2. Pop 3. display 4. exit

2

Stack under flow

1. Push 2. Pop 3. display 4. exit

enter

2] Infix to Postfix

```
int Priority (char x)
{
    if (x == 'c')
        return 0;
    if (x == '+' || x == '-')
        return 1;
    if (x == '*' || x == '/')
        return 2;
    return 0;
}
```

```
int main()
{
    char exp[100], *e, x;
    scanf ("%s", exp);
    e = exp;
    while (*e != '\0')
    {
        if (isalnum (*e))
            printf ("%c", *e);
        else if (*e == "c")
            push (*e);
        else if (*e == ')')
        {
            while (x != 'c')
            {
                x = pop();
                printf ("%c", x);
            }
        }
    }
}
```

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