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18M19C5053
Dnyanesh Theras

void push (char ch)
{

if (top == max-1)
printf("stack is full\n");
else

{
top++;
stack[top] = ch;

}

char pop()

{

char ch = -1;
if (top == -1)
printf("stack is empty\n");
else

{
ch = stack[top];
top--;

}

return ch;

}

int stackempty()

{

if (top == -1)

return 1;

return 0;

}

18M1915053
 Dnyanesh Thonwar

```
char stacktop()
{
    if (top == -1)
        return -1;
    else
    {
        char ch = stack[top];
        return ch;
    }
}
```

```
int priority(char ch) (char ch)
{
    if (ch == '^')
        return 5;
    else if (ch == '-')
        return 4;
    else if (ch == '*')
        return 3;
    else if (ch == '+')
        return 2;
    else if (ch == '/')
        return 1;
    else
        return 0;
}
```


18M19CS053
Diyanshu Thakur

```
int main()
```

```
{
```

```
scanf("%s", infix)
```

```
for (j=0; j infix[j] != '\0'; j++)
```

```
{
```

```
if (infix[j] == '(')
```

```
{
```

```
push(infix[j]);
```

```
}
```

```
else if (infix[j] == ')')
```

```
{
```

```
while (stacktop() != 0 '(')
```

```
{
```

```
postfix[k] = pop();
```

```
k++;
```

```
}
```

```
pop();
```

```
}
```

```
else if (infix[j] == '^' || infix[j] == '/' || infix[j] == '*'  
|| infix[j] == '-' || infix[j] == '+')
```

```
{
```

```
while (stackempty() == 0 && priority(stacktop()) >=  
priority(infix[j]))
```

```
{
```

```
postfix[k] = pop();
```

```
k++;
```

```
}
```

```
}
```


18MIS0505

Dyanshu Thakur

else

{

postfix[k] = prefix[i];

k++;

}

}

while (!stack.empty())

{

postfix[k] = pop();

k++;

}

for (j = 0; j < k; j++)

{

printf("%c", postfix[j]);

}

}