

Infix to Postfix algorithm

InfixtoPostfix(exp)

{ create a Stack S

for i ← 0 to length(exp) - 1

{ if exp[i] is operand

res ← res + exp[i]

else if exp[i] is operator

while (!S.empty() && HasHigherPre(S.top(), exp[i]))

{ res ← res + S.top()

S.pop()

}

S.push(exp[i])

else if IsOpeningParentheses(exp[i])

S.push(exp[i])

else if IsClosingParentheses(exp[i])

S.push(exp[i])

else if IsClosingParentheses(exp[i])

{ while (!S.empty() && !IsOpeningParentheses(S.top()))

{ res ← res + S.top()

S.pop()

}

S.pop()

}

}

```
while (!S.empty())
```

```
{ res <- res + S.top()  
  S.pop()
```

```
}
```

```
return res
```

```
}
```