**Topik 4 Stack (infixpostfix)**

**Jumat**, 23 Oktober 2020

**Latihan 1 :**

**Kode program :**

//header program................................................

#include<stdio.h>

#include<conio.h>

#include<iostream.h>

#include<stdlib.h> // for exit().................

#include<ctype.h> // for isdigit(char ).........

#include<string.h>

#define SIZE 100

char stack[SIZE];

int top = -1;

//define push operation.........................................

**void push(char item)**

{

if(top >= SIZE-1)

{

cout << "\nStack Penuh ! ";

}

else

{

top = top+1;

stack[top] = item;

}

}

//define pop operation..........................................

**char pop()**

{

char item ;

if(top <0) {

cout << "Stack Kosong ! ";

getchar();

exit(1);

}

else {

item = stack[top];

top = top-1;

}

return(item);

}

//operator yang diijinkan.......................................

**int is\_operator(char symbol)**

{

If (symbol == '^' || symbol == '\*' || symbol == '/' ||

symbol == '+' || symbol =='-')

{

return 1;

}

else

{

return 0;

}

}

//mengecek derajat operator.....................................

**int precedence(char symbol)**

{

if(symbol == '^')

{

return(3);

}

else if(symbol == '\*' || symbol == '/')

{

return(2);

}

else if(symbol == '+' || symbol == '-')

{

return(1);

}

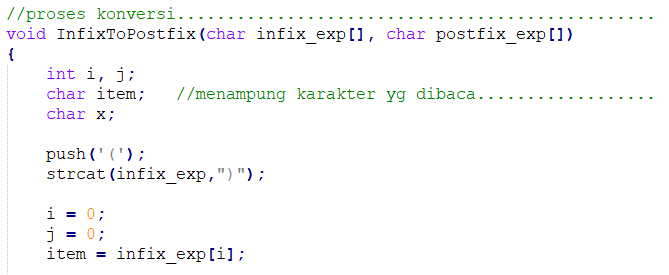
else

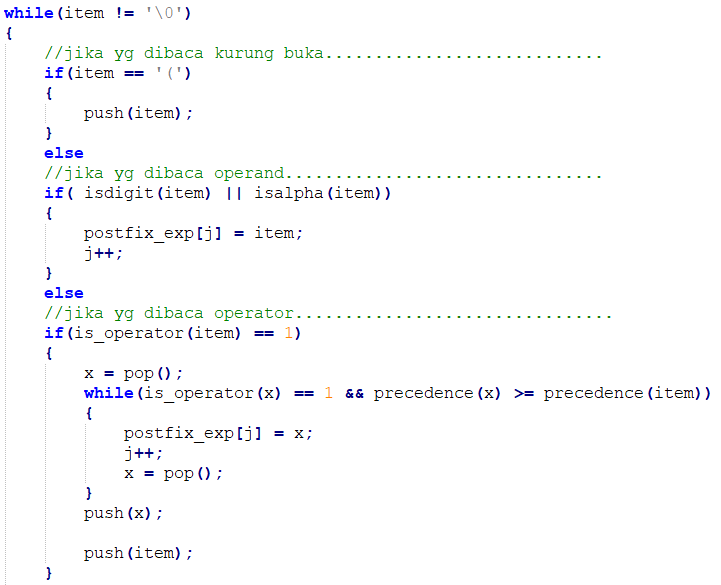
{

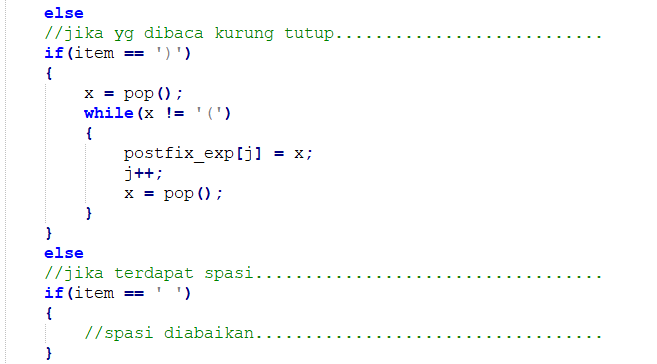
return(0);

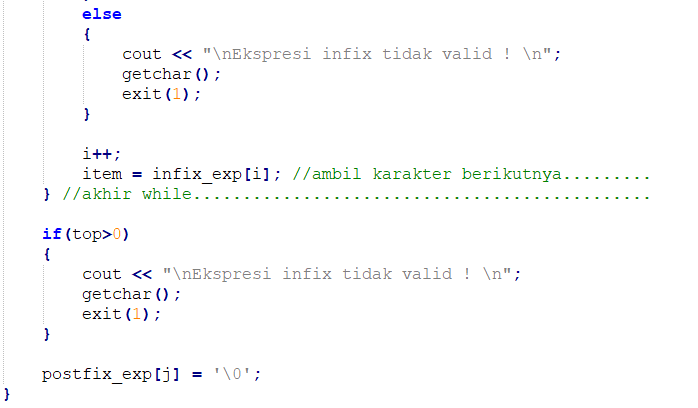
}

}









//program utama..................................................

**void main()**

{

char infix[SIZE], postfix[SIZE];

cout << "Program Konvesi Infix ke Postfix\n";

cout << "\nMasukkan notasi Infix : ";

gets(infix);

//konversikan infix ke postfix................................

InfixToPostfix(infix, postfix);

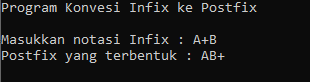
cout << "Postfix yang terbentuk : ";

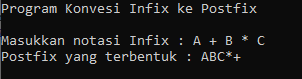
cout << postfix;

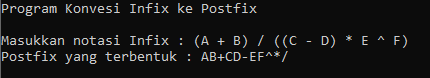
getch();

}

**Output program :**

****

****

****

**Tugas : (stack konversi infix ke postfix)**

Apa output program jika diisikan :

1. ( A + B ) / ( C – D )
2. A + B / C – D
3. A \* B + C / D
4. A \* ( B + C ) / D

Berapa hasil perhitungan dari masing-masing soal diatas jika A = 5, B= 4, C = 2, dan D = 1

DIKUMPULKAN :

Nama File : **A12P99AlproXXXXXNama** (99 nomor tugas, XXXXX : 5 digit NIM terakhir)

Format file : PDF

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