**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

Dikirim ke : suharnawi@dsn.dinus.ac.id

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