



**STRUKTUR DATA**

**Kelas : CS-39-02**

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//1302154158//SALMA//

#include "stack.h"

void createEmpty(Stack \*S){

(\*S).top=NULL;

}

address alokasi(int noPegX, char\* namaX, int gajiX){

address p=(address)malloc(sizeof(b1));

if(p!=NULL){

(\*p).noPeg=noPegX;

(\*p).nama=namaX;

(\*p).gaji=gajiX;

}

return p;

}

void dealokasi(address p){

free(p);

}

boolean isEmpty(Stack S){

return (S).top==NULL;

}

void pushAddress(Stack \*S, address p){

(\*p).next=(\*S).top;

(\*S).top=p;

}

void push(Stack \*S, int noPegX, char\* namaX, int gajiX){

address p=alokasi(noPegX,namaX,gajiX);

pushAddress(S,p);

}

void pop(Stack \*S, int \*noPegX, char\* namaX, int \*gajiX){

address p=(\*S).top;

\*noPegX=(\*p).noPeg;

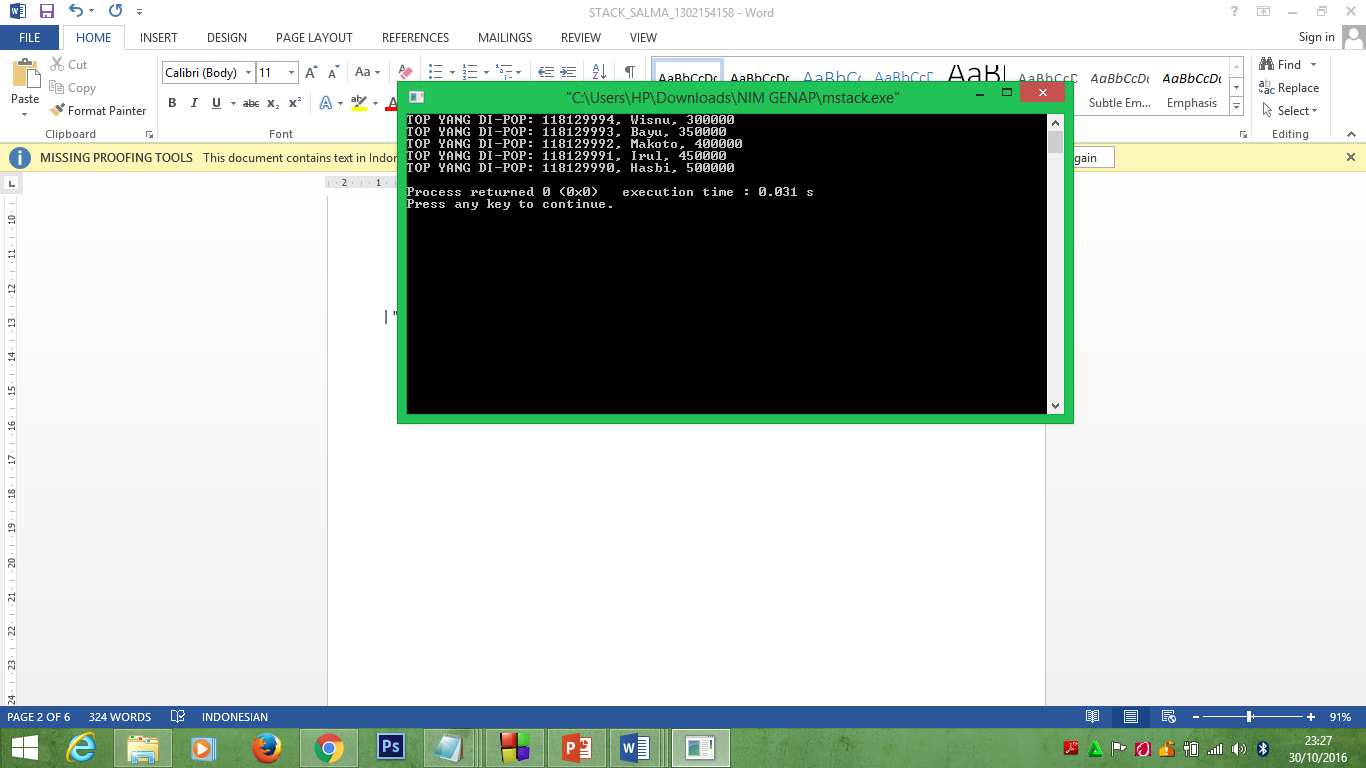
strcpy(namaX,(\*p).nama);

\*gajiX=(\*p).gaji;

(\*S).top=(\*p).next;

dealokasi(p);

}



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**SOAL BONUS**

1. **HEADER**

#include <stdio.h>

#include <stdlib.h>

#include "boolean.h"

#ifndef stack\_H

#define stack\_H

typedef struct tElmtPutar \*address;

typedef struct tElmtPutar {

char\* huruf;

address next;

} p1;

typedef struct {

address top;

} Stack;

// HEADER PROSEDUR DAN FUNGSI

void createEmpty(Stack \*S); //create stack kosong

address alokasi(char\* hurufX);

void dealokasi(address p);

boolean isEmpty(Stack S);

void pushAddress(Stack \*S, address p);

void push(Stack \*S, char\*namaX);

void pop(Stack \*S, char\*namaX);

#endif

1. **DRIVER**

#include <stdio.h>

#include "bonus.c"

int main()

{

Stack st;

createEmpty(&st);

address p0 = alokasi(118129990,"Doraemon mencari Nobita","Irul");

address p1 = alokasi(118129991,"Nobita mencari Doraemon","Hasbi");

address p2 = alokasi(118129992,"Catur 1 langkah","Makoto");

pushAddress(&st,p0);

pushAddress(&st,p1);

pushAddress(&st,p2);

push(&st,118129993,"Upin mencari Ipin","Wisnu");

push(&st,118129994,"Cinta itu apa???","Bayu");

char hurufTop[50];

while(!isEmpty(st)){

printf("Masukkan Huruf/n",st);

scanf("%s",&st);

pop(&st,&hurufTop);

push(&st,&hurufTop);

printf("TOP YANG DI-PUTAR: %s\n",hurufTop);

}

return 0;

}

1. **BODY**

//1302154158//SALMA//

#include "bonus.h"

// HEADER PROSEDUR DAN FUNGSI

void createEmpty(Stack \*S){ //create stack kosong

(\*S).top=NULL;

}

address alokasi(char\* hurufX){

address p=(address)malloc(sizeof(p1));

if(p!=NULL){

(\*p).huruf=hurufX;

}

return p;

}

void dealokasi(address p){

free(p);

}

boolean isEmpty(Stack S){

return (S).top=NULL;

}

void pushAddress(Stack \*S, address p){

(\*p).next=(\*S).top;

(\*S).top=p;

}

void push(Stack \*S, char\*hurufX){

address p=alokasi(hurufX);

pushAddress(S,p);

}

void pop(Stack \*S, char\*hurufX){

address p=(\*S).top;

strcpy(hurufX,(\*p).huruf);

(\*S).top=(\*p).next;

dealokasi(p);

}

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