C- Programming

* no string data type in c… strings are stored as character array eg. S[] = “Hello”;
* It is not always necessary to specify size of 1D array during declaration.
* Do not use == to compare strings, use strcmp instead… However, there will be no compilation error even if == is used there will be no compilation error. Of course, no output will come either.
* a++ : value of a is incremented after the line is executed ++a : value of a is incremented before the line is executed
* %u is used for unsigned integers
* -11%2 -> returns -1 as the answer not 1

STACK AS AN ARRAY

#include <stdio.h>

# define MAXLEN 10

int a[MAXLEN];

int top = -1;

void push();

void pop();

void display();

void push()

{

int x;

if(top == MAXLEN-1)

{

printf("\nOverflow");

return;

}

printf("\nEnter element to be pushed into stack: ");

scanf("%d",&x);

top++;

a[top]=x;

return;

}

void pop()

{

if(top==-1)

{

printf("\nUnderflow");

return;

}

printf("\nElement deleted is: %d",a[top]);

top--;

return;

}

void display()

{

int i;

printf("\n");

for(i=0;i<=top;i++)

{

printf("%d ",a[i]);

}

}

int main()

{

int n;

do

{

printf("\nInput 1 for push, 2 for pop and 3 for exit: ");

scanf("%d",&n);

switch(n)

{

case 1: push();

display();

break;

case 2: pop();

display();

break;

case 3: return 0;

default: printf("\nInvalid input");

}

}while(n!=3);

return 0;

}