using System;

using System.Collections;

using System.Collections.Generic;

namespace Doi\_So\_Nhi\_Phan\_export\_stack

{

public class Stack

{

public int[] data = new int[20];

public int top;

}

class Program

{

public static Boolean IsFull(Stack S)

{

if (S.top == S.data.Length - 1)

{

return true;

}

else

{

return false;

}

}

public static Boolean IsEmpty(Stack S)

{

if (S.top == -1)

{

return true;

}

else

{

return false;

}

}

public static void Push(Stack S, int x)

{

if (IsFull(S) == false)

{

S.top++;

S.data[S.top] = x;

}

else

{

Console.WriteLine("Full");

}

}

public static void Pop(Stack S)

{

if (IsEmpty(S) == false)

{

S.top--;

}

else

{

Console.WriteLine("empty");

}

}

public static void Peek(Stack S)

{

if (IsEmpty(S) == false)

{

Console.WriteLine("Top Element: " + S.data[S.top]);

}

else

{

Console.WriteLine("Stack Underflow");

}

}

public static void NumberElement(Stack S)

{

string str = " ";

for (int i = S.top; i >= 0; i--)

{

str += S.data[i] + " ";

}

Console.WriteLine("Element: " + str);

}

static void Main(string[] args)

{

Stack S = new Stack();

int n;

int r;

Console.WriteLine("Nhap so can chuyen: ");

n = Convert.ToInt32(Console.ReadLine());

while (n > 0)

{

r = (n % 2);

Push(S, r);

n = (n / 2);

}

Console.WriteLine("Nhi phan sau khi doi: ");

NumberElement(S);

Peek(S);

}

}

}