Лабораторная работа №3

***I Код (написан на языке Pascal)***

**Program** lab3;

**type**

Element = ^Nod;

Nod = **record**

info : char;

link : Element;

**end**;

**var**

stiva : Element;

p : string;

**procedure** pune(c:char);

**var** r: Element;

**begin**

**new**(r);

r^.info:=c;

r^.link:=stiva;

stiva:=r;

**end**;

**procedure** scoate;

**var** r: Element;

**begin**

r:=stiva;

stiva:=stiva^.link;

dispose(r);

**end**;

**function** corect(t:string):boolean;

**var** i: integer; G: 0..1;

**begin**

G:=0;

i:=1;

**while** (i<=length(t)) **and** (G=0) **do**

**begin**

**case** t[i] **of**

'(','[','{': pune(t[i]);

')': **if** (stiva <> Nil) **and** (stiva^.info='(') **then** scoate **else** G:=1;

']': **if** (stiva <> Nil) **and** (stiva^.info='[') **then** scoate **else** G:=1;

'}': **if** (stiva <> Nil) **and** (stiva^.info='{') **then** scoate **else** G:=1;

**else** G:=1;

**end**;

i:=i+1;

**end**;

corect:= (stiva = Nil) **and** (G = 0);

**end**;

**begin**

write('Scrieti sirul de paranteze: ');

readln(p);

stiva:=nil;

**if** corect(p) **then** writeln('Sir corect')

**else** writeln('Sir incorect');

**end**.