DUYỆT CÂY TỔNG QUÁT THEO 3 PHƯƠNG PHÁP

program DuyetRung;

uses crt;

const n=12;

type item=char;

pointer=^node;

node=record

info:item;

numChild:integer;

child:array[1..n] of pointer;

end;

var

T:pointer;

i:integer;

m:integer;

procedure inputTree(var T:pointer);

var

i:integer;

p:pointer;

begin

if T=nil then

begin

new(T);

write('Nhap nut goc ');

readln(T^.info);

end;

p:=T;

write('Nhap so con cua node ',p^.info,':');

readln(p^.numChild);

for i:=1 to p^.numChild do

begin

new(p^.child[i]);

write('Nhap nut con thu ',i,':');

readln(p^.child[i]^.info);

end;

for i:=1 to p^.numChild do

inputTree(p^.child[i]);

end;

procedure DuyetTruoc(T:pointer);

var j,i:integer;

begin

if T=nil then write('Cay Rong') else

begin

write(T^.info,'');

for i:=1 to m do

begin

for j:=1 to T^.numChild do

DuyetTruoc(T^.child[i]);

end;

end;

end;

procedure DuyetGiua(T:pointer);

var i,j:integer;

begin

if T=nil then write('Cay Rong') else

begin

write(T^.info,'');

for i:=1 to m do

begin

for j:=1 to T^.numChild do

DuyetGiua(T^.child[i]);

end;

end;

end;

procedure DuyetSau(T:pointer);

var j,i:integer;

begin

if T=nil then write('Cay Rong') else

begin

write(T^.info,'');

for i:=1 to m do

begin

for j:= 1 to T^.numChild do

DuyetSau(T^.child[i]);

end;

end;

end;

BEGIN

clrscr;

write ('nhap vao so cay: ');

readln (m);

if T = nil then

begin

new(T);

write('Nhap nut goc: ');

readln(T^.info);

end;

for i:= 1 to m do

begin

writeln ('nhap cay thu: ',i);

inputTree(T);

end;

DuyetTruoc(T);

DuyetGiua(T);

DuyetSau(T);

readln;

END.