OSP 2012

26. uses crt,math;

function F1 (i, j : integer) :integer integer;

begin

if (i < 0) or (j < 0) then

begin

F1 := max(i, j) + 1;

Writeln (‘F1(‘,i,’,’,j,’) = ‘F1);

End

Else

If i = j then

Begin

F1 := F1(i + 1, j - 1);

//writelen (‘ F1(‘, i + 1,’,’,j – 1,’) = ‘, F1 ;

End

Else

begin

F1 := F1(i - 2, j - 1) + F1(i - 1, j - 2);

Writeln (‘ F1(‘,i,’,’,j,’) =F1 (‘,i – 2,’,’,j – 1,’) +F1 (‘,i – 1,’,’,j-2,’) = ‘,F1;

end;

end

begin

F1 (4,3);

End.

Pemanggilannya adalah :

F(4,3) => F(2,2) + F(3,1)

F(2,2) => F(3,1)

F(3,1) => F(1,0) + F(2,-1)

Sebagai basecase maka nilai:

F(2,-1) = 2+1=3

F(-1,-1)=-1+1=10

F(0,-2)=0+1=1

Masukan nilai :

F(4,3) => F(2,2) + F(3,1) = 8

F(2,2) => F(3,1) = 4

F(3,1) => F(1,0) + F(2,-1) = 4

F(1,0) => F(-1,-1) + F(0,-2) = 1

Jadi, nilai F(4,3) adalah = 8.

35. soal 35-36

function campur(n : integer) : integer;

begin

campur := n \* n;

end;

function aduk(x,y,z : integer) : integer;

begin

if (y = 0) then

aduk := 1

else if (y mod 2 = 0) then

aduk := campur(aduk(x,y div 2,z)) mod z

else

aduk := ( (x mod z) \* aduk(x,y-1,z) ) mod z;

end;

var

a,b,c : integer;

begin

readln(a,b,c);

writeln(aduk(a,b,c));

end.

Fungsi aduk (x,y,z) akan menghasilkan xy mod z

35. Aduk (2,10,10) = 210 mod 10 = 4

36. aduk(4,40,5) = 440 mod 5 = 1

40. var m,i,a,b,c,d:longint;

begin

readln(m);

a:=1;b:=1;c:=1;

for i:=4 to m do

begin

d:=a+b+c;

a:=b;

b:=c;

c:=d;

end;

writeln(c);

end.

|  |  |  |
| --- | --- | --- |
| **I** | **d a** | **b c** |
| - | - 1 | 1 1 |
| **4** | **5 1** | **1 3** |
| **5**  **6**  **7** | **3 1**  **9 3**  **17 5** | **5 5**  **5 9**  **9 17** |
| **8** | **31 9** | **17 31** |

**Jawab :31**