

Exercice 1 : Pointeurs

Qu'affichent ces deux programmes ?

```
var a,b,c:integer;
    p,q,r:^integer;
begin
  a:=1;b:=2;c:=3;
  new(p);
  q:=p;
  q^:=a+b;
  new(r);
  p^:=p^+1;
  r^:=q^;
  c:=r^;
  writeln(a:3,b:3,c:3,p^:3,q^:3,r^:3);
  p:=r;
  p^:=p^+r^;
  p^:=p^+r^;
  p^:=p^+r^;
  writeln(p^:3,q^:3,r^:3);
  p:=@a;
  q:=@b;
  p^:=a+b+c;
  q^:=a+b+c;
  writeln(a:3,b:3,c:3);
  for a:=1 to 2 do
  begin
    q^:=p^+1;
    q:=r
  end;
  writeln(a:3,b:3,c:3,p^:3,q^:3,r^:3);
  p:=@b;
  for c:=1 to 3 do
  begin
    p^:=r^+q^-c;
    r:=p;p:=q;q:=r
  end;
  writeln(p^:3,q^:3,r^:3)
end.
```

```
type p=^m;
      m=record
        i:integer;
        x,y:p
      end;
var a,b:p;
begin
  new(a);
  new(b);
  a^.i:=1;
  b^.i:=2;
  a^.x:=a;
  a^.y:=b;
  b^.y:=a;
  new(b^.x);
  b^.x^.i:=3;
  b^.x^.x:=a;
  b^.x^.y:=b;
  writeln(a^.x^.x^.y^.x^.x^.y^.i)
end.
```

corrigé

Exercice 1 :

Question 1 :

1 2 4 4 4 4

32 4 32

7 13 4

2 2 4 2 3 3

8 13 13

Question 2 :

2