Exercise 1.7 Subtleties of `foo = bah` and `foo := @(bah)`

```
1    {a,b,c,d,e,f,h#}::Indices.
2
3    foo := B_{b} A_{a}.
4    bah := A_{a} C_{c}.
5
6    # cdbBeg(print.0107)
7    print("foo = "+str(foo))
8    print("bah = "+str(bah)+"\n")
9
10   print("type foo = "+str(type(foo)))
11   print("type bah = "+str(type(bah))+"\n")
12
13   print("id foo = "+str(id(foo)))
14   print("id bah = "+str(id(bah))+"\n")
15
16   bah = foo
17
18   print("foo = "+str(foo))
19   print("bah = "+str(bah)+"\n")
20
21   sort_product (foo)
22
23   print("bah = "+str(bah)+"\n")
24
25   print("id foo = "+str(id(foo)))
26   print("id bah = "+str(id(bah))+"\n")
27
28   bah := @(foo).
29
30   print("id foo = "+str(id(foo)))
31   print("id bah = "+str(id(bah))+"\n")
32   # cdbEnd(print.0107)
```

```
1    foo = B_{b} A_{a}
2    bah = A_{a} C_{c}
3
4    type foo = <class 'cadabra2.Ex'>
5    type bah = <class 'cadabra2.Ex'>
6
7    id foo = 4501679720
8    id bah = 4501679608
9
10   foo = B_{b} A_{a}
11   bah = B_{b} A_{a}
12
13   bah = A_{a} B_{b}
14
15   id foo = 4501679720
16   id bah = 4501679720
17
18   id foo = 4501679720
19   id bah = 4501688760
```

Note that the line numbers referenced in the following are those of the output above not those of the Cadabra source.

- Lines 7 and 8 show that the objects `foo` and `bah` point to distinct areas of memeory (i.e., they point to different objects).

- Lines 10 and 11 show the result of the statement `bah = foo`.

- Line 13 shows that `bah` has changed after the statement `sort_product (foo)`.

- Lines 15 and 16 verifies that `foo` and `bah` point to the same object (so changes in `foo` will be seen by `bah`, as just noted).

- Lines 18 and 19 shows that after `bah := @(foo)` the symbols `bah` and `foo` no longer point to the same object.