Exercise 1.8 Syntax errors – original code

```
{a,b,c,d,e,f#}::Indices.
     C{#}::Symmetric.
    foo := A_{a} B_{b} + C_{ab}.
                                                         # C_{ab} should be C_{ab}
     bah := B_{b} A_{a} + C_{ba}.
                                                         # C_{ba} should be C_{b a}
     meh := @(foo) - @(bah)
                                                         # missing dot or semi-colon terminator
     if meh == 0:
        print ("meh is zero, and all is good")
                                                         # indentation error, drop the dot
           success = True.
10
     else:
        print ("meh is not zero, oops")
12
                                                         # indentation error, drop the dot
           success = False.
13
     canonicalise (meh).
                                                         # terminate with ; or nothing
15
     sort_product (meh);
16
17
     {\alpha\beta\gamma}::Indices.
                                                         # separate list elements with commas
19
     foo := Ex ("A_{ab} - A_{ab}");
                                                         # use = for assignment, A_{ab} should be A_{a b}
20
     bah := Ex ("A_{\alpha\beta} - A_{\alpha\beta}"); # use = for assignment, need raw string in Ex
```

Exercise 1.8 Syntax errors – corrected code

```
{a,b,c,d,e,f#}::Indices.
    C{#}::Symmetric.
    foo := A_{a} B_{b} + C_{a}
                                                       # cdb (ex-0108.101,foo)
    bah := B_{b} A_{a} + C_{b}
                                                       # cdb (ex-0108.102,bah)
    meh := @(foo) - @(bah).
                                                       # cdb (ex-0108.103,meh)
    if meh == 0:
       print ("meh is zero, and all is good")
       success = True
10
    else:
11
       print ("meh is not zero, oops")
12
       success = False
13
14
    canonicalise (meh)
                                                       # cdb (ex-0108.104,meh)
15
    sort_product (meh);
                                                       # cdb (ex-0108.105,meh)
16
17
    {\alpha,\beta,\gamma}::Indices.
18
19
    foo = Ex ("A_{a b} - A_{a b}");
                                                      # cdb (ex-0108.106,foo)
20
    bah = Ex (r"A_{\alpha}); \# cdb (ex-0108.107, bah)
```

```
\begin{split} & \text{ex-0108.101} := A_a B_b + C_{ab} \\ & \text{ex-0108.102} := B_b A_a + C_{ba} \\ & \text{ex-0108.103} := A_a B_b + C_{ab} - B_b A_a - C_{ba} \\ & \text{ex-0108.104} := A_a B_b - B_b A_a \\ & \text{ex-0108.105} := 0 \\ & \text{ex-0108.106} := 0 \\ & \text{ex-0108.107} := 0 \end{split}
```