# Harper — EIWL Sections 39, 40

## Section 39

Looks good. 8/8

In[161]:=
```
x = RandomInteger[100]
```
Out[161]=
```
39
```

In[162]:=
```
{x, x + 1, x + 2, x^2}
```
Out[162]=
```
{39, 40, 41, 1521}
```

In[163]:=
```
Clear[x]
```

In[164]:=
```
x := RandomInteger[100]
```

In[165]:=
```
{x, x + 1, x + 2, x^2}
```
Out[165]=
```
{69, 89, 31, 5041}
```

## Section 40

In[166]:=
```
f[n_] := n^2
```

In[167]:=
```
poly[a_] := Graphics[Style[RegularPolygon[a], Orange]]
```

In[168]:=
```
f[b_, c_] := {c, b}
```

In[169]:=
```
f[d_, e_] := d e / (d + e)
```

In[170]:=
```
f[f_, g_] := {f + g, f - g, f / g}
```

In[171]:=
```
evenodd[h_] := If[EvenQ[h], Black, White]; evenodd[0] = Red
```
Out[171]=

In[172]:=
```
f[i_, j_, k_] := f[1, _, _] = j + k; f[2, _, _] = j * k; f[3, _, _] = j^k
```
Out[172]=
$$j^k$$

In[173]:=
```
fibonacci[l_] := fibonacci[l - 1] + fibonacci[l - 2]; fibonacci[0] = 1; fibonacci[1] = 1
```
Out[173]=
```
1
```

In[174]:=
```
animal[m_] := Interpreter["Animal"][m]["Image"]
```

In[175]:=

In[176]:=
```
animal["cat"]
```
Out[176]=

In[177]:=
```
nearwords[n_, o_] := Nearest[WordList[], n, o]
```

In[178]:=
```
nearwords["cat", 5]
```
Out[178]=
```
{cat, at, bat, cab, cad}
```

In[179]:=