

THIS PROGRAM IS FOR A HOPFIELD NETWORK WITH A SINGLE LAYER OF
4 FULLY INTERCONNECTED NEURONS. THE NETWORK SHOULD RECALL THE
PATTERNS 1010 AND 0101 CORRECTLY.

```
nrn[0].weightv[0] is 0
nrn[0].weightv[1] is -3
nrn[0].weightv[2] is 3
nrn[0].weightv[3] is -3
activation is 3
output value is 1
```

```
nrn[1].weightv[0] is -3
nrn[1].weightv[1] is 0
nrn[1].weightv[2] is -3
nrn[1].weightv[3] is 3
activation is -6
output value is 0
```

```
nrn[2].weightv[0] is 3
nrn[2].weightv[1] is -3
nrn[2].weightv[2] is 0
nrn[2].weightv[3] is -3
activation is 3
output value is 1
```

```
nrn[3].weightv[0] is -3
nrn[3].weightv[1] is 3
nrn[3].weightv[2] is -3
nrn[3].weightv[3] is 0
activation is -6
output value is 0
```

```
pattern= 1  output = 1  component matches
pattern= 0  output = 0  component matches
pattern= 1  output = 1  component matches
pattern= 0  output = 0  component matches
```

```
nrn[0].weightv[0] is 0
nrn[0].weightv[1] is -3
nrn[0].weightv[2] is 3
nrn[0].weightv[3] is -3
```

```
output value is 0
```

```
nrn[1].weightv[0] is -3
nrn[1].weightv[1] is 0
nrn[1].weightv[2] is -3
nrn[1].weightv[3] is 3
activation is 3
output value is 1
```

```
nrn[2].weightv[0] is 3
nrn[2].weightv[1] is -3
nrn[2].weightv[2] is 0
nrn[2].weightv[3] is -3
activation is -6
output value is 0
```

```
nrn[3].weightv[0] is -3
nrn[3].weightv[1] is 3
nrn[3].weightv[2] is -3
nrn[3].weightv[3] is 0
activation is 3
output value is 1
```

```
pattern= 0  output = 0  component matches
pattern= 1  output = 1  component matches
pattern= 0  output = 0  component matches
pattern= 1  output = 1  component matchesPress any key to continue . . .
```