

```

1 function bitstringtofloat(s)
2     strexp = s[2:12]
3     strfrac = s[13:end]
4
5     sgn =
6     if s[1] - '0' == 0
7         1.0
8     else
9         -1.0
10    end
11
12    exp = 0
13
14    for i in [1:11;]
15        chr = strexp[i]
16        digit = strexp[i] - '0'
17        exp |= digit << (11 - i)
18    end
19
20    exp -= 1023
21
22    mantiss = 1.0
23
24    for i in [1:52;]
25        digit = strfrac[i] - '0'
26        mantiss += digit * 2.0^(-i)
27    end
28
29    print("sign: $sgn, mantiss: $mantiss, exp: $exp\n")
30
31    sgn * mantiss * 2.0^exp
32 end
33
34
35

```