```
math. randomseed(tostring(os. time()): reverse(): sub(1, 7))
 23456789
         fp=assert(i o. open("bnet_samples. txt", "w"))
         function I(c)
                        n=math.random()
                        if (c<=n) then</pre>
                                return O;
                        el se
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                                return 1;
                        end
         end
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         num=1000
        da={}
d1={{0. 2, 0. 8}, {0. 7, 0. 9}}
d2={0. 1, 0. 7}
d3=0
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         d4 = 0
         for i =1, num do
                        aa[i]={}
for j=1, 4 do
aa[i][j]=0
                        end
         end
        for i = 1, num do
    aa[i][1]=I(0.7)
    aa[i][2]=I(0.9)
    aa[i][3]=I(d1[aa[i][1]+1][aa[i][2]+1])
    aa[i][4]=I(d2[aa[i][3]+1])
    d3=d3+aa[i][3]
    d4=d4+aa[i][4]
    fn: write(table.concat(aa[i], "\t"), "\n"]
                 fp: wri te(table. concat(aa[i], "\t"), "\n")
         end
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         pri nt(d3/num, d4/num)
```