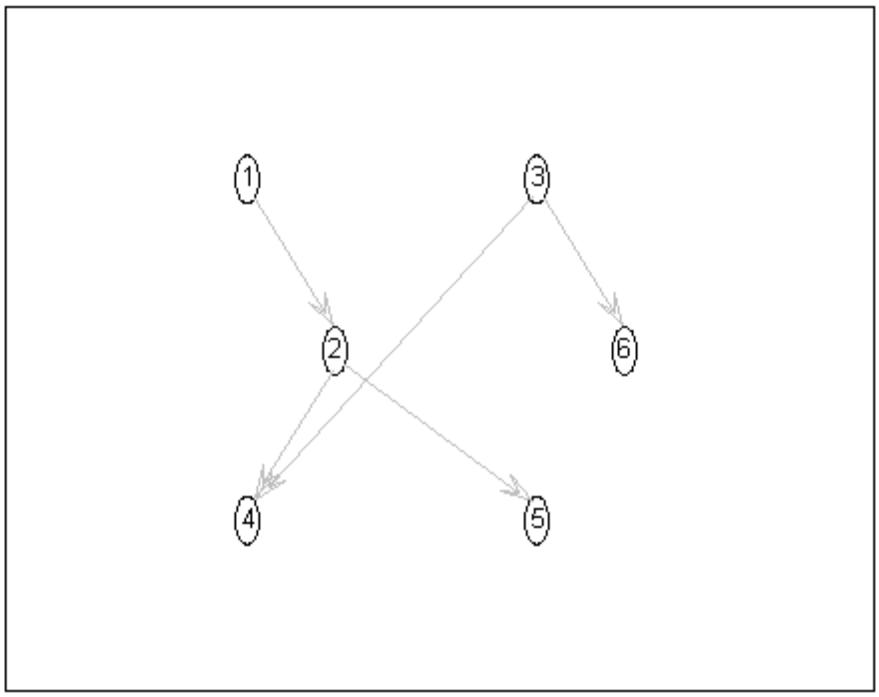
```
clear all
False = 1;
True = 2;
```

$$x^2 + e^{\pi i}$$

```
N = 6;
dag=zeros(N,N);
PT = 1; HO = 2; BT = 3; HA = 4; SA = 5; PX = 6;
dag(PT, HO) = 1;
dag([HO BT], HA) = 1;
dag(HO, [SA HA]) = 1;
dag(BT, [HA PX]) = 1;

discrete_nodes=1:N;
node_sizes=2*ones(1,N);
bnet=mk_bnet(dag,node_sizes,'names',{'PT','HO','BT','HA','SA','PX'},'discrete',dis

bnet.CPD{PT}=tabular_CPD(bnet,PT,[0.8,0.2]);
bnet.CPD{BT}=tabular_CPD(bnet,BT,[0.999,0.001]);
bnet.CPD{HO}=tabular_CPD(bnet,HO,[1,0.3,0,0.7]);
bnet.CPD{HA}=tabular_CPD(bnet,HA,[0.98,0.3,0.1,0.1,0.02,0.7,0.9,0.9]);
bnet.CPD{SA}=tabular_CPD(bnet,SA,[0.9,0.2,0.1,0.8]);
bnet.CPD{PX}=tabular_CPD(bnet,PX,[0.99,0.02,0.01,0.98]);

draw_graph(dag)

engine=jtree_inf_engine(bnet);
evidence=cell(1,N);
evidence{PX}= True;
%evidence{BT}= True;
[engine,loglik]=enter_evidence(engine,evidence);
m=marginal_nodes(engine, BT);
m.T(2)
```

```
ans =

    0.2833    0.3833    0.6167    0.2833    0.6167    0.7167


ans =

    0.0893
```



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