

Project4

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```
Plot_1 <- grViz(diagram = "digraph flowchart {  
  # define node aesthetics  
  node [fontname = Arial, shape = oval, color = Lavender, style = filled]  
  tab1 [label = '@@1']  
  tab2 [label = '@@2']  
  tab3 [label = '@@3']  
  tab4 [label = '@@4']  
  tab5 [label = '@@5']  
  tab6 [label = '@@6']  
  tab7 [label = '@@7']  
  tab8 [label = '@@8']  
  tab9 [label = '@@9']  
  tab10 [label = '@@10']  
  tab11 [label = '@@11']  
  tab12 [label = '@@12']  
  tab13 [label = '@@13']  
  tab14 [label = '@@14']  
  tab15 [label = '@@15']  
  tab16 [label = '@@16']  
  tab17 [label = '@@17']  
  tab18 [label = '@@18']  
  tab19 [label = '@@19']  
  tab20 [label = '@@20']  
  tab21 [label = '@@21']  
  tab22 [label = '@@22']  
  tab23 [label = '@@23']  
  tab24 [label = '@@24']  
  tab25 [label = '@@25']  
  tab26 [label = '@@26']  
  tab27 [label = '@@27']  
  tab28 [label = '@@28']  
# set up node layout  
  tab1 -> tab2;  
  tab2 -> tab3;  
  tab3 -> tab4;  
  tab2 -> tab5;  
  tab5 -> tab6;  
  tab6 -> tab7;  
  tab7 -> tab8;  
  tab8 -> tab9;  
  tab9 -> tab10;  
  tab8 -> tab11;
```

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tab11 -> tab12;
tab6 -> tab13;
tab13 -> tab14;
tab14 -> tab15;
tab15 -> tab16;
tab16 -> tab17;
tab17 -> tab18;
tab16 -> tab19;
tab19 -> tab20;
tab14 -> tab21;
tab21 -> tab 22;
tab22 -> tab23;
tab23 -> tab24;
tab24 -> tab25;
tab25 -> tab26;
tab22 -> tab27;
tab27 -> tab28
}
[1]: 'Convergence Test'
[2]: 'Test for Divergence (lim n-infinity=0?)'
[3]: 'No'
[4]: 'sum an diverges'
[5]: 'Yes'
[6]: 'P-series: Does  $a_n = 1/n^p$ ,  $n$  greater than equal to 1?'
[7]: 'Yes'
[8]: 'Is  $p$  greater than 1?'
[9]: 'Yes'
[10]: 'sum an converges'
[11]: 'No'
[12]: 'sum an diverges'
[13]: 'No'
[14]: 'Geometric Series: Does  $a_n = a^{(n-1)}$ ,  $n$  greater than equal to 1'
[15]: 'Yes'
[16]: 'Is  $|a|$  less than 1?'
[17]: 'Yes'
[18]: ' $\sum_{n=1}^{\infty} a_n = a/(1-a)$ '
[19]: 'No'
[20]: 'sum an diverges'
[21]: 'No'
[22]: 'Alt Srs Test:  $a_n = (-1)^n b_n$  or  $a_n = (-1)^{(n-1)} b_n$ ,  $b_n > 0$ '
[23]: 'Yes'
[24]: 'is  $b_{n+1}$  less than greater to  $b_n$  and  $\lim_{n \rightarrow \infty} b_n = 0$ '
[25]: 'Yes'
[26]: 'sum an converges'
[27]: 'No'
[28]: 'Try one of the following'

")
Plot_1

```