```
BW_alg()
begin
  if Noise_stage_check() = FAILURE then return FAILURE
  if Distor_stage_check() = FAILURE then return FAILURE
  select NetList(source) and Eliminate()
  repeat
    begin
      count all devices from every stage
      Numb_noise = all devices from Noise_stage
      Numb_dist = all devices from Dist_stage
    end
  until all devices from NetList have been tried
  if Numb_noise > 1 then select_device( last Noise stage device )
  else
    if Noise_stage_device is not Differential then i_x_selected_device = g_m_noise
    else
      if Numb_dist > 1 then select_device( last Dist stage device)
      else
        if Dist_stage_device is Differential then  i_x_selected_device = g_m_diff_dist
        else
          i_x_selected_device = g_m_dist
  repeat
    begin
      TF = Calculate_TF( from  i_x_selected_device to V_ g_m_selected_device )
      LGP = multiply TF by  g_m_selected_device
      DC_LGP = LGP when s=0
      Poles = Calculate_poles ( use LGP )
      Number_poles = count Poles
        repeat
          begin
            Poles_prod = multiply Poles_prod by Poles
          end
        until all poles have been tried
        /* n = Number_poles */
       Fn_max = n-root of (1-(DC_LGP)(Feedback_value)) multiplied by Poles_prod
       if Fn_max is TOO LOW then Adjust_fn_max()
       else
         if Fn_max ≥ desired_BW then return SUCCESS
       else
         Compensate()
    end
  until the Adjust and/or Compensate have been tried
end
```