In [27]:

```
import pandas as pd
import numpy as np
%matplotlib notebook
import matplotlib.pyplot as plt
import matplotlib.gridspec as gridspec

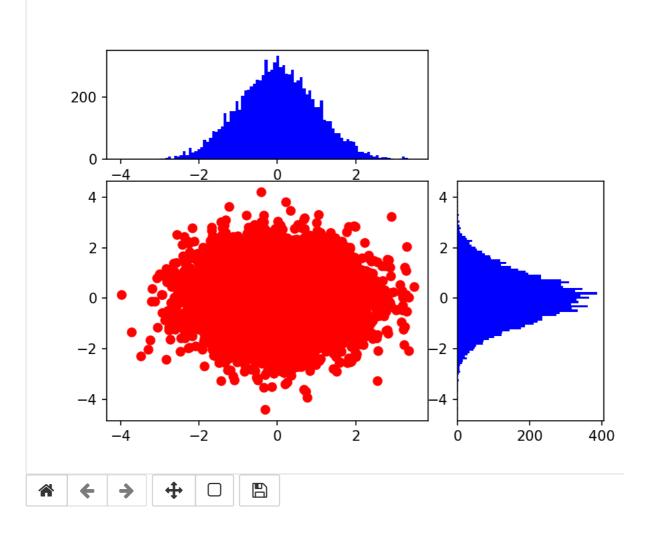
plt.figure()
gspec = gridspec.GridSpec(3, 3)

top_histogram = plt.subplot(gspec[0,:2])
side_histogram = plt.subplot(gspec[1:,:2])
lower_right = plt.subplot(gspec[1:,2:])

Y = np.random.normal(loc = 0.0, scale = 1.0, size = 10000) #loc = 평균, scale = 분산
X = np.random.normal(loc = 0.0, scale = 1.0, size = 10000)

top_histogram.hist(X, bins = 100, color = 'blue')
side_histogram.scatter(X, Y, color = 'red')
lower_right.hist(Y, bins = 100, orientation = 'horizontal', color = 'blue')
```





Out [27]:

```
(array([
                 0.,
                        0.,
                               0.,
                                     0.,
                                            1.,
                                                   0.,
                                                          0.,
                                                                1.,
                                                                       1.,
                                                                            2.,
           1.,
                                                   7.,
                               1.,
                                     2.,
                                            3.,
                                                          6.,
```

```
26., 20., 27., 34., 45.,
                                           48., 52., 70., 73., 87.,
       102., 122., 124., 145., 176., 188., 211., 223., 235., 236., 275.,
       283., 333., 317., 362., 315., 336., 330., 365., 342., 387., 327.,
       346., 293., 288., 309., 287., 232., 231., 197., 190., 169., 149.,
       121., 136., 118., 92., 91., 76., 68., 54.,
                                                        49.,
                                                                     2.,
        40., 25., 22.,
                          12.,
                                 8.,
                                       6.,
                                             9.,
                                                   5.,
                                                         2.,
                                                               5.,
         2.,
               3.,
                     0.,
                           1.,
                                 0.,
                                       1.,
                                             0.,
                                                   1.,
         1.]),
array([-4.41758353, -4.33141745, -4.24525138, -4.1590853, -4.07291923,
       -3.98675315, -3.90058708, -3.814421, -3.72825493, -3.64208885,
       -3.55592278, \ -3.4697567 \ , \ -3.38359063, \ -3.29742455, \ -3.21125848,
       -3.1250924 , -3.03892633 , -2.95276025 , -2.86659417 , -2.7804281 ,
       -2.69426202, -2.60809595, -2.52192987, -2.4357638, -2.34959772,
       -2.26343165, -2.17726557, -2.0910995 , -2.00493342, -1.91876735,
       -1.83260127, -1.7464352, -1.66026912, -1.57410305, -1.48793697,
       -1.4017709 , -1.31560482 , -1.22943875 , -1.14327267 , -1.0571066 ,
       -0.97094052, -0.88477445, -0.79860837, -0.7124423, -0.62627622,
       -0.54011015, -0.45394407, -0.367778, -0.28161192, -0.19544585,
       -0.10927977, -0.0231137, 0.06305238,
                                               0.14921845, 0.23538453,
        0.3215506 , 0.40771668,
                                  0.49388275,
                                               0.58004883,
                                                            0.6662149 ,
                                  0.92471313,
        0.75238098, 0.83854705,
                                               1.0108792 ,
                                                            1.09704528,
        1.18321135.
                    1.26937743.
                                  1.3555435 .
                                               1.44170958.
                                                            1.52787565.
                    1.7002078 ,
                                  1.78637388,
                                               1.87253996,
        1.61404173,
                                                            1.95870603,
                    2.13103818,
                                  2.21720426,
                                               2.30337033,
                                                            2.38953641.
        2.04487211,
        2.47570248, 2.56186856,
                                  2.64803463,
                                               2.73420071,
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                                  3.07886501,
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        3.33736323, 3.42352931,
                                  3.50969538,
                                               3.59586146,
                                                            3.68202753,
        3.76819361,
                     3.85435968,
                                  3.94052576, 4.02669183, 4.11285791,
        4.19902398]),
```

<BarContainer object of 100 artists>)