**import** numpy **as** np *# linear algebra*

**import** pandas **as** pd *# data processing, CSV file I/O (e.g. pd.read\_csv)*

**import** matplotlib.pyplot **as** plt

**import** seaborn **as** sns

**import** random

*# Input data files are available in the "../input/" directory.*

*# For example, running this (by clicking run or pressing Shift+Enter) will list all files under the input directory*

**import** os

**for** dirname, \_, filenames **in** os**.**walk('/kaggle/input'):

**for** filename **in** filenames:

print(os**.**path**.**join(dirname, filename))

*# Any results you write to the current directory are saved as output.*

**%**matplotlib inline

In [4]:

data **=** pd**.**read\_csv('/content/rainfall\_India\_2017.csv')**.**rename(columns**=**str**.**lower)

data**.**describe()**.**T

Out[4]:

|  | **count** | **mean** | **std** | **min** | **25%** | **50%** | **75%** | **max** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **year** | 4188.0 | 1959.220630 | 33.717097 | 1901.0 | 1930.000 | 1959.00 | 1988.000 | 2017.0 |
| **jan** | 4184.0 | 18.938337 | 33.793128 | 0.0 | 0.600 | 5.95 | 22.000 | 583.7 |
| **feb** | 4185.0 | 21.599427 | 35.731734 | 0.0 | 0.500 | 6.50 | 26.600 | 403.5 |
| **mar** | 4182.0 | 27.412912 | 46.927963 | 0.0 | 1.000 | 7.90 | 31.375 | 605.6 |
| **apr** | 4184.0 | 43.071845 | 68.150985 | 0.0 | 3.000 | 15.45 | 49.650 | 595.1 |
| **may** | 4185.0 | 85.660860 | 122.695137 | 0.0 | 8.600 | 36.90 | 97.800 | 1168.6 |
| **jun** | 4183.0 | 230.117475 | 234.292087 | 0.4 | 70.800 | 138.80 | 305.000 | 1609.9 |
| **jul** | 4181.0 | 347.020043 | 268.850702 | 0.0 | 175.600 | 285.00 | 418.500 | 2362.8 |
| **aug** | 4184.0 | 289.742185 | 188.426071 | 0.0 | 155.850 | 258.50 | 377.625 | 1664.6 |
| **sep** | 4182.0 | 197.316332 | 135.547646 | 0.1 | 100.400 | 173.70 | 266.125 | 1222.0 |
| **oct** | 4181.0 | 95.324707 | 99.194851 | 0.0 | 14.600 | 65.20 | 148.300 | 948.3 |
| **nov** | 4177.0 | 39.496433 | 68.358706 | 0.0 | 0.600 | 9.40 | 45.300 | 648.9 |
| **dec** | 4178.0 | 18.968645 | 43.053759 | 0.0 | 0.100 | 3.00 | 17.500 | 617.5 |
| **annual** | 4162.0 | 1409.449207 | 902.599421 | 62.3 | 803.025 | 1120.35 | 1643.575 | 6331.1 |

In [5]:

len(data['year']**.**unique()), data['year']**.**min(), data['year']**.**max()

Out[5]:

(117, 1901, 2017)

In [8]:

data **=** data**.**fillna(0)

In [7]:

data**.**hist(figsize**=**(14,10),color**=**'orange');

