|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| continent | meanExpect\_2018 | meanGDP\_2018 | varexp\_2018 | varGDP\_2018 | cor\_exp\_gdp\_2018 |
| Africa | 64.97 | 3967.80 | 31.34314 | 20411365 | 0.493479 |
| Americas | 76.70 | 13358.70 | 13.58167 | 1.19E+08 | 0.522536 |
| Asia | 74.45 | 14492.69 | 33.85644 | 2.13E+08 | 0.750333 |
| Europe | 80.11 | 26421.67 | 6.344379 | 1.32E+08 | 0.791173 |
| Oceania | 82.35 | 34100.00 | 0.605 | 76880000 | 1 |

Overall Average Life Expectancy – 72.63

Overall Average GDP – 13307.63

1. From the plots we can see that for the year 2018 the relationship between GDP and life expectancy can be explained using a linear regression line for all the continents. From table we can also observe good correlation (> 0.45) between the two variables for all the continents. We could observe the following pattern for the different continents-
   1. In Africa we can see GDP < 15000 and life expectancy < 75 for most of the countries. The mean Life Expectancy and GDP is lowest amongst all the continents, there metrics are also lower than the overall averages. Only a few countries are above the overall average for GDP – Botswana, Gabon, Libya and Mauritius; and only 3 countries – Algeria, Egypt and Mauritius are above in term of average Life Expectancy than overall average. From table, we can observe least variance in the GDP for countries in Africa continent. The slope of the linear regression is positive with magnitude <value>, this shows the value of GDP does not change much with increase in life expectancy.