Q.1 What insights we could derive on basis of month for every temperature?

Ans.

* In case of bearing temperature, failure cases are less in starting months of the year than the ending months
* In case of nacelle temperature, till month of June, the temperature is decreasing continuously and after that sudden increase and then consistent temperature
* In case of ambient temperature, non failure cases are less in starting months of the year than ending months. Failure cases are negative in the starting months but then a sudden increase and then consistent level till the end of the year
* In case of gear box inlet temperature, consistent no failure levels for every month of the year. Consistent level of temperature for cases of failure for both starting 6 months and ending 6 months. In between these intervals, we have a sudden spike
* In cases of gear oil temperature, consistent level of temperature throughout the year for both cases of failure and no failure
* In case of wheel hub temperature and nacelle ambient temperature, both are showing consistent level of temperature in earlier set of months and ending set of months. Showing a sudden spike near month of June

Q.2 What insights we could derive on basis of seasons for other factors apart from various temperatures listed as features of dataset?

Ans.

* Considering wind speed, wind direction, rotor speed, power, yaw angle, generator speed, everywhere we have consistent level of no failure with temperature from spring to autumn.
* Power, Rotor speed and generator speed has consistent decrease while going from spring to autumn.
* Wind direction has decrease from spring to winter but is consistent from spring to autumn while yaw angle is at consistent level in every season. So, according to the season, there is no sync between wind direction and yaw angle. According to change in wind direction, yaw angle is not correlated. Hence, we should have a system that could correlate yaw angle with wind direction for maximum power output

Q.3 How various temperatures in the dataset are affected with seasons?

Ans.

* Except gear oil temperature, we can find a decreasing pattern for cases of failure for every temperature from spring, winter, summer and autumn.
* Consistent level of failures in all seasons for every temperature listed as features of the dataset.

Q.4 What insights we could derive on basis of month for other factors apart from various temperatures listed as features of dataset?

Ans.

* We have no change for cases of no failure for every factor apart from various temperature during all these months of the year
* Only for Yaw angle, for cases of failure we have consistent level for every month
* Apart from Yaw angle, we have multiple variations for cases of failure
* We have increase in Wind speed for earlier months rather than later months
* We have decrease in Rotor speed and Generator speed for earlier months than later months.