Python Listing Example

```python
1   from math import erf, sqrt
2   def is_anomalous(pred_mse: float, mu_hat: float, sigma_hat: float, conf_thresh: float) -> bool
    :
3       """
4       Use the Cumulative Distribution Function of a Gaussian to perform p-value test
5       Args:
6           pred_mse: Mean Squared Error between model prediction and true value.
7           mu_hat: Approximated mean of the Gaussian MSE distribution over a validation set.
8           sigma_hat: Approximated standard deviation of the Gaussian MSE distribution over a
    validation set.
9       """
10      cdf_result = (1/2)*(1 + erf((pred_mse - mu_hat)/(sigma_hat * sqrt(2))))
11      if cdf_result < conf_thresh or cdf_result > 1 - conf_thresh:
12          return True
13      else:
14          return False
```

Listing 1: Simple p-value test in Python, assuming an underlying Gaussian distribution for model errors.

Common spellcheckers like chktex, and extensions like LTeX or cSpell are confused by python environments and throw errors like crazy. One day I might be able to dig the documentation and add an appropriate vscode config file.