1. {}
2. { foo: 42}
3. The list is an ordered collection of data, whereas the dictionaries store the data in the form of key-value pairs using the hashtable structure.
4. Get a key error
5. There is no difference. The in operator checks whether a value exists as a key in the dictionary.
6. cat' in spam checks whether there is a 'cat' key in the dictionary, while 'cat' in spam.values() checks whether there is a value 'cat' for one of the keys in spam.
7. spam.setdefault('color', 'black')
8. pprint.pprint()