

# REPORT TITLE

## 2018

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APRIL 14

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# Title Heading

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### Question 1

The app firstly ask the user to specify whether he wants info on a dog or cat or to exit the application if he specified the exit in the console response the application exits if he specifies the dog or cat the text is converted to lowercase then the text variable is passed to a dictionary as a key value which is passed through the trygetvalue method that try to retrieve the info based on parameters and the second parameter that is passed to the dictionary is a reference to the animalparent class by object variable and if the first parameter text is dog or cat then the createDog constructor method is called to construct the cat or dog class with the name and food values and instantiate those classes as objects in heap and if those conditions can be satisfied the dog or cat info is printed to the console by overriding the getinfo method in the base class which is called by reference. And if the user imputed anything else then dog or cat or exit the application will print to screen the message The Key you entered could not be found in the dictionary. Please try again. Or if the user enters exit the application will exit.

Basically it is a app that ask the user for dog or cat or to exit the application and then it prints the dog or cat info to console window if user entered do or cat correctly it display an error message more or less if you don't specify one of the 3 values dog, cat or exit.

\*Question 2 my object is a reference to the animalParent class by the out keyword this means that a reference in memory is assign to myobject containing the base class and is instantiated through the child classes when their method is override the base class method getinfo and is through the default constructor

### Question 3

This out keyword passes the AnimalParent class as a reference type to the dictionary and is used because this method could return multiple values because of cat or dog being the unknown values that could or could not be returned it is unknown returning values that is user dependent that is why the out is used.

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Question 4 the virtual keyword specifies that the method is open to overriding and modification and the override modifies the method or changes the function within the method as opposed to what the original methods does. Or could be a combination with the original functionality and custom special circumstance or situations to cater for that the original method does not cater for.

#### Question 5

Because of inheritance the AnimalParentclass can be used to return the values of the dog or cat class because the dog and cat class overrides the getinfo method and thus the AnimalParentClass return the data of cat or dog because the virtual keyword allows the getinfo to be overridden if one of the dog or cat class is called in the dictionary and

And using dog or cat is not the best way to do it because you would have to make two dictionaries to pass the data into to be retrieved through the main method maybe that is not the best reason why the dog or cat is used but using the animalparentclass is the best way because you only call the dog or cat class through parameter and return through overriding getinfo which means that you can make the method more flexible and is also less work less code.

#### Question 6

Well the dictionary values are passed in as reference types that point to where the objects are stored in memory. And instantiated objects of the dog and cat class is created within the dictionary and the dog or cat class's stored info is basically injected within the animalparentclass and return through overriding and inheritance

#### Question 7

Well like we used it in this program is a good example when you do not know what values your dictionary could return because like in this example the user basically determines which object is passed out as a result or the other way like normal or any other situation where you could use a dictionary store values to your key and the corresponding value to it and reference the value by key.

