1. Inheritance of class :

```
class Animal:
    def __init__(self, name):
        self.name = name  # Initialize the name attribute

    def speak(self):
        pass  # Placeholder method to be overridden by child classes

# Child class inheriting from Animal
class Dog(Animal):
    def speak(self):
        return f"{self.name} barks!"  # Override the speak method

# Creating an instance of Dog
dog = Dog("Buddy")
print(dog.speak())
```

2.prime numbers code

```
# Prime numbers from 1 to 10
for num in range(1, 11):
    if num > 1:
        for i in range(2, num):
            if num % i == 0:
                break
        else:
            print(num)
```

3.addition of prime number :

```
# Sum of prime numbers from 1 to 10
prime_sum = 0

for num in range(1, 11):
   if num > 1:
      for i in range(2, num):
         if num % i == 0:
            break
      else:
         prime_sum += num

print("Sum of prime numbers from 1 to 10 is:", prime_sum)
```

4. factorial numbers:

```
   # Factorial of a number

num = int(input("Enter a number: "))
factorial = 1

if num < 0:
   print("Factorial does not exist for negative numbers.")
elif num == 0:
   print("Factorial of 0 is 1.")
else:
   for i in range(1, num + 1):
      factorial *= i
   print("Factorial of", num, "is", factorial)
```

7.file write:

```
file = open("C://Users//Asus//OneDrive//Desktop\\Sanjivani.txt", "w")
file.write("Hello, World!")
file.close()
```

6.file read :

```
f = open("C://Users//Asus//OneDrive//Desktop\\Sanjivani.txt", "r")
print(f.read())
```

8.append

```
f = open("C://Users//Asus//OneDrive//Desktop\\Sanjivani.txt", "a")
f.write("This is an appended line.\n")
f.close()
```