You are given the implementation of two class: **CoinBank** and **Coin**. In this exam, you **must not** modify the completed methods of these two classes (otherwise we may fail to grade your work).

Instruction:

1. Create a new Java project and import the skeleton code
2. Complete the undone implementation according to the requirements.
3. Submit your code through the link in Canvas: https://canvas.ust.hk/courses/42336/assignments/206439
   You are allowed to submit multiple times within the examination duration. The final score is given based on your last submission.

Question:

Coin is an abstract class describing crypto currency. It's method *getAsUSD* needs to be overridden in its subclasses. *getAsUSD* transform the value of the crypto currency into the amount of US dollars of equal worth.

Task:

1. Implement a class **BitCoin**, which is a subclass of **Coin.** The constructor of **BitCoin** should take a single argument of *double* type denoting its amount. For example:

   c = new BitCoin(1.0);
   Then *c* worths 1.0 bitcoin, equivalent to *47806.80* USD.

   Also, noted that the constructor of the super class **Coin** requires a String to represent the coin type. For **BitCoin**, use the representation "bitcoin".

2. Implement **CoinBank.walletBtcWorth**:
   This function takes a list of **Coin** objects, return the sum of bitcoin worth **measured in US dollars**.

   Hint and requirements:
   1. Use *getAsUSD* to obtain the worth of a coin in US dollars.
   2. Use the *instanceof* operator to only count the bitcoins (we may have other types of coins in the list).

Sample Test case:

Run CoinBank.main, you should get exactly the following output:

```
bitcoin:501971.4 USD
bitcoin:348989.64 USD
Bitcoins in the wallet worth 1008723.48 USD
```