

```

class Article                                // an article
{
public:
virtual Identifier getId() = 0;              // its identifier
};

class Shop                                    // a shop
{
public:                                       // number n of articles in shop
virtual int numberOfArticles() = 0;
// get article i, 0 <= i < n
virtual Article* getArticle(int i) = 0;

set<Identifier> getArticleIds(Shop& s){
    set<Identifier> elements;
    for(int i = 0 ; i < s.numberOfArticles(); i++)
        elements.insert(s.getArticle(i)->getID());
    return elements;
}
};

```

Write a method

```
set<Identifier> getArticleIds(Shop& s);
```

which takes a shop s as parameter and returns as its result the set of the identifiers of all articles contained in s.