

Lecture – 8

Array of Objects

Introduction

- Arrays can be used to hold multiple objects of same type.
- Creating an array of class type results in the creation of a list of references that will point to the objects.

String class Example

- Strings Arrays
 - `String city[] = new String[5];`
 - `city[0] = new String("Melbourne");`
 - `city[1] = new String("Sydney");`

BankAccount class Example

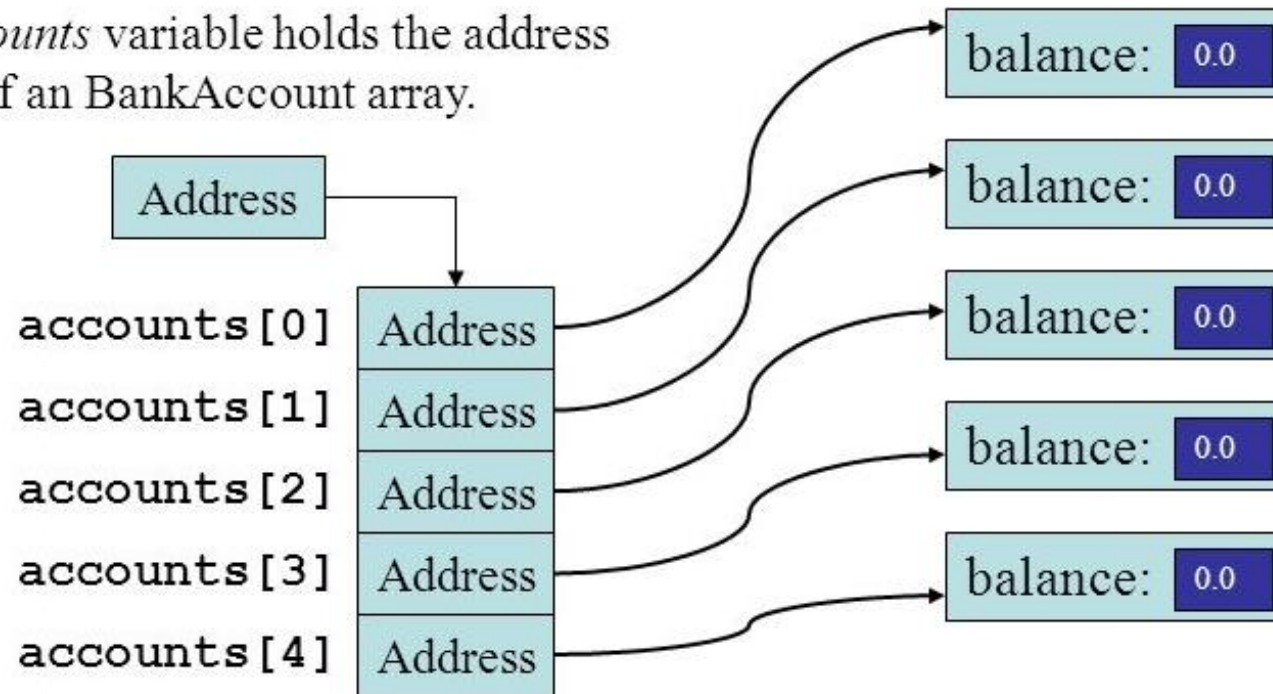
- Consider a class BankAccount with balance as data member:

```
public class BankAccount {  
  
    private double balance;  
  
    public BankAccount(double balance) {  
        this.balance = balance;  
    }  
  
    public double getBalance() {  
        return balance;  
    }  
  
    public void setBalance(double balance) {  
        this.balance = balance;  
    }  
  
}
```

```
public class BankAccountRunner {  
    public static void main (String [] arg)  
    {  
        BankAccount accounts [] = new BankAccount[5];  
        for ( int i = 0; i<5 ; i++)  
        {  
            accounts[i] = new BankAccount (0);  
        }  
    }  
}
```

Memory Structure – Object array

The *accounts* variable holds the address of an BankAccount array.



Memory Structure – Object array

```
(a) Employee[ ] emp;
```

```
(b) emp = new Employee[5];
```

```
(c) for (int i = 0; i < emp.length; i++)
    emp[i] = new Employee( );
```

