```
//this_java_09장_예외_중요소스
//
//runtime_exception
//
/*public class ArrayIndexOutOfBoundsExceptionExample {
	public static void main(String[] args) {
		String data1 = args[0];
		String data2 = args[1];

		System.out.println("args[0]: " + data1);
		System.out.println("args[1]: " + data2);
	}
}*/
public class ArrayIndexOutOfBoundsExceptionExample {
	public static void main(String[] args) {
		if(args.length == 2) {
			String data1 = args[0];
			String data2 = args[1];
			System.out.println("args[0]: " + data1);
			System.out.println("args[1]: " + data2);
		} else {
			System.out.println("[실행 방법]");
			System.out.print("java  ArrayIndexOutOfBoundsExceptionExample  ");
			System.out.print("값1  값2");
		}
	}
}
//
//TryCatchFinally
//
public class TryCatchFinallyRuntimeExceptionExample {
	public static void main(String[] args) {
		String data1 = null;
		String data2 = null;
		try {
			data1 = args[0];
			data2 = args[1];
		} catch(ArrayIndexOutOfBoundsException e) {
			System.out.println("실행 매개값의 수가 부족합니다.");
			System.out.println("[실행 방법]");
			System.out.println("java          TryCatchFinallyRuntimeExceptionExample
num1  num2");
			return;
		}

		try {
			int value1 = Integer.parseInt(data1);
			int value2 = Integer.parseInt(data2);
			int result = value1 + value2;
			System.out.println(data1 + "+" + data2 + "=" + result);
		} catch(NumberFormatException e) {
			System.out.println("숫자로 변환할 수 없습니다.");
		} finally {
			System.out.println("다시 실행하세요.");
		}
	}
}
//
//MultiCatch
//
public class MultiCatchExample {
	public static void main(String[] args) {
		try {
			String data1 = args[0];
			String data2 = args[1];
			int value1 = Integer.parseInt(data1);
			int value2 = Integer.parseInt(data2);
			int result = value1 + value2;
			System.out.println(data1 + "+" + data2 + "=" + result);
```

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                } catch(ArrayIndexOutOfBoundsException | NumberFormatException e) {
                        System.out.println("실행 매개값의 수가 부족하거나 숫자로 변환할 수 없습니
다..");
                } catch(Exception e) {
                        System.out.println("알수 없은 예외 발생");
                } finally {
                        System.out.println("다시 실행하세요.");
                }
        }
}
//
//Throws
//
public class ThrowsExample {
        public static void main(String[] args) {
                try {
                        findClass();
                } catch(ClassNotFoundException e) {
                        System.out.println("클래스가 존재하지 않습니다.");
                }
        }

        public static void findClass() throws ClassNotFoundException {
                Class clazz = Class.forName("java.lang.String2");
        }
}
//
//사용자 정의 예외
//
public class BalanceException extends Exception {
        public BalanceException() { }
        public BalanceException(String message) {
                super(message);
        }
}
public class Account {
        private long balance;

        public Account() { }

        public long getBalance() { return balance; }

        public void deposit(int money) { balance += money; }

        public void withdraw(int money) throws BalanceException {
                if(balance < money) {
                        throw new BalanceException("잔고부족:"+(money-balance)+" 모자람");
                }
                balance -= money;
        }
}
public class AccountExample {
        public static void main(String[] args) {
                Account account = new Account();
                //예금하기
                account.deposit(10000);
                System.out.println("예금액: " + account.getBalance());

                //출금하기
                try {
                        account.withdraw(30000);
                } catch(BalanceException e) {
                        String message = e.getMessage();
                        System.out.println(message);
                        System.out.println();
                        e.printStackTrace();
                }
        }
}
```