

# chap2-3

## 타입 변환 예제

# 자동타입변환 - PromotionExample.java

```
package sec03.exam01;

public class PromotionExample {
    public static void main(String[] args) {
        //자동 타입 변환
        byte byteValue = 10;
        int intValue = byteValue;
        System.out.println("intValue: " + intValue);

        char charValue = '가';
        intValue = charValue;
        System.out.println("가의 유니코드: " + intValue);

        intValue = 50;
        long longValue = intValue;
        System.out.println("longValue: " + longValue);

        longValue = 100;
        float floatValue = longValue;
        System.out.println("floatValue: " + floatValue);

        floatValue = 100.5F;
        double doubleValue = floatValue;
        System.out.println("doubleValue: " + doubleValue);
    }
}
```

## 강제타입변환 -

```
package sec03.exam02;

public class CastingExample {
    public static void main(String[] args) {
        int intValue = 44032;
        char charValue = (char) intValue;
        System.out.println(charValue);

        long longValue = 500;
        intValue = (int) longValue;
        System.out.println(intValue);

        double doubleValue = 3.14;
        intValue = (int) doubleValue;
        System.out.println(intValue);
    }
}
```

## 정수 타입의 연산

```
package sec03.exam03;

public class ByteOperationExample {
    public static void main(String[] args) {
        byte result1 = 10 + 20;
        System.out.println(result1);

        byte x = 10;
        byte y = 20;
        int result2 = x + y;
        System.out.println(result2);
    }
}
```

# 기본 타입과 문자열 간의 변환

```
package sec03.exam07;

public class PrimitiveAndStringConversionExample {
    public static void main(String[] args) {
        int value1 = Integer.parseInt("10");
        double value2 = Double.parseDouble("3.14");
        boolean value3 = Boolean.parseBoolean("true");

        System.out.println("value1: " + value1);
        System.out.println("value2: " + value2);
        System.out.println("value3: " + value3);

        String str1 = String.valueOf(10);
        String str2 = String.valueOf(3.14);
        String str3 = String.valueOf(true);

        System.out.println("str1: " + str1);
        System.out.println("str2: " + str2);
        System.out.println("str3: " + str3);
    }
}
```

# printf() 메소드 사용방법

```
package sec04.exam01;

public class PrintfExample {
    public static void main(String[] args) {
        int value = 123;
        System.out.printf("상품의 가격:%d원\n", value);
        System.out.printf("상품의 가격:%6d원\n", value);
        System.out.printf("상품의 가격:%-6d원\n", value);
        System.out.printf("상품의 가격:%06d원\n", value);

        double area = 3.14159 * 10 * 10;
        System.out.printf("반지름이 %d인 원의 넓이:%10.2f\n", 10, area);

        String name = "홍길동";
        String job = "도적";
        System.out.printf("%6d | %-10s | %10s\n", 1, name, job);
    }
}
```

## 입력된 키코드를 변수에 저장

```
package sec04.exam02;

public class KeyCodeExample {
    public static void main(String[] args) throws Exception {
        int keyCode;

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);
    }
}
```

## 입력된 키코드를 변수에 저장

```
package sec04.exam02;

public class KeyCodeExample {
    public static void main(String[] args) throws Exception {
        int keyCode;

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);

        keyCode = System.in.read();
        System.out.println("keyCode: " + keyCode);
    }
}
```



# 입력된 키의 개수와 상관없이 키코드 읽기

```
package sec04.exam03;

public class ContinueKeyCodeReadExample {
    public static void main(String[] args) throws Exception {
        int keyCode;

        while(true) {
            keyCode = System.in.read();
            System.out.println("keyCode: " + keyCode);
        }
    }
}
```