

Data Types, Variables and Arrays (Chapter 3 of Schilit)

Object Oriented Programming BS (CS/SE) II

By

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Java is Strongly Typed Language

- Compiler is the Boss
 - Every Declaration must have a data type

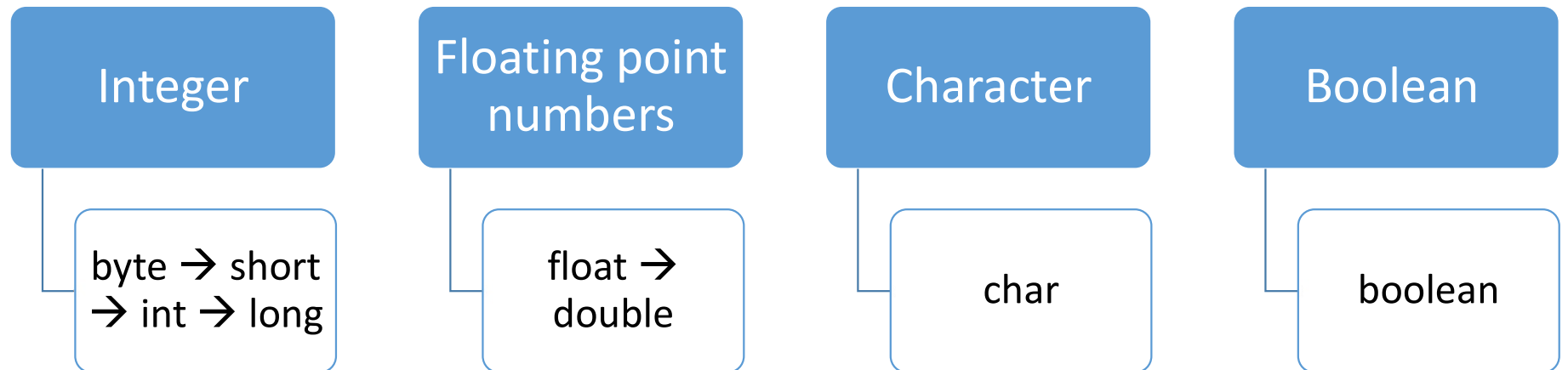


Primitive Data Types

- A set of basic data types from which all other data types are constructed.



Primitive Types



Integer

Name	Width	Range
long	64	−9,223,372,036,854,775,808 to 9,223,372,036,854,775,807
int	32	−2,147,483,648 to 2,147,483,647
short	16	−32,768 to 32,767
byte	8	−128 to 127



Code:
“LightTravel”

How many mile light travels in 1000 days? Remember it travels 186000 miles/second

Floating Point Type

Name	Width in Bits	Approximate Range
double	64	4.9e−324 to 1.8e+308
float	32	1.4e−045 to 3.4e+038

Taking Input

Package:

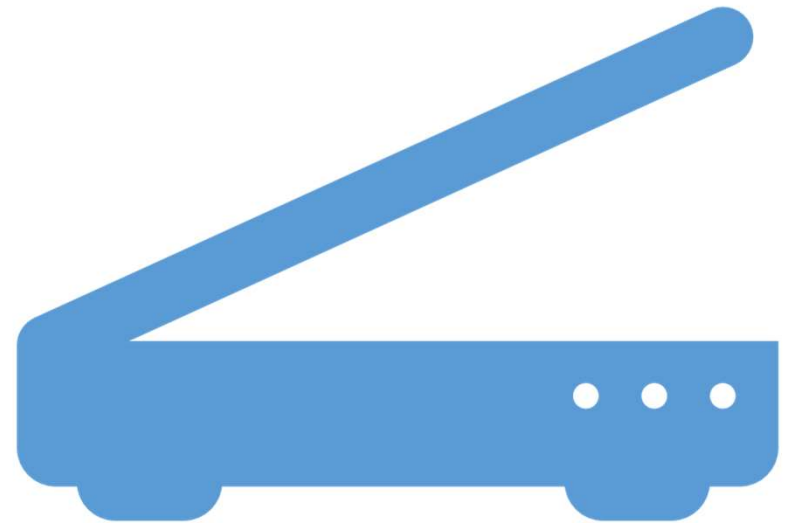
java.util

Class:

Scanner

Syntax:

```
import java.util.Scanner;
```



Program to take Input of different data types

```
import java.util.Scanner;
class FirstProgram{

    public static void main(String args[]){

        Scanner scan=new Scanner(System.in);

        //int types
        byte b1=scan.nextByte();
        int i1=scan.nextInt();
        short s1=scan.nextShort();
        long l1=scan.nextLong();

        //float and double
        float f1=scan.nextFloat();
        double d1=scan.nextDouble();

        //char
        char c1=scan.next().charAt(0);

        //String
        String str1=scan.nextLine();

    }

}
```