

## Datatypes to deal with Real Numbers.

To deal with real numbers or fractional numbers or decimal numbers java provides 2 data types

- ① float data type
- ② double data type.

### float data type :

→ float data type occupies 4 bytes of memory.

→ float data type can be used when we want the precision after the decimal point more than 5-7 digits.

### Program using float

```
class DataTypesDemo  
{
```

```
    public static void main (String [] args)  
    {
```

```
        float gravity = 9.8f;  
        System.out.println ("Gravity = " + gravity);
```

```
    }
```

```
}
```



output:

$$\text{Gravity} = 9.8$$

Note: while storing a number inside float type variable we must use the abbreviation 'f' or 'F'.

double datatype.

→ double datatype occupies 8 bytes of memory.

→ double datatype can be used when we want the precision after the decimal point more than 14-16 digits.

Program on double datatype.

```
class Demo
{
    public static void main (String [] args)
    {
        double pi = 3.14159265359;
        System.out.println("pi = "+pi);
    }
}
```

output

$$\text{pi} = 3.14159265359.$$

