Primitive toifalarning qobiq(Wrapper) classlari, Math klassi

Wrapper classes

Primitive Type	Wrapper class
boolean	Boolean
char	Character
byte	Byte
short	Short
int	Integer
long	Long
float	Float
double	Double

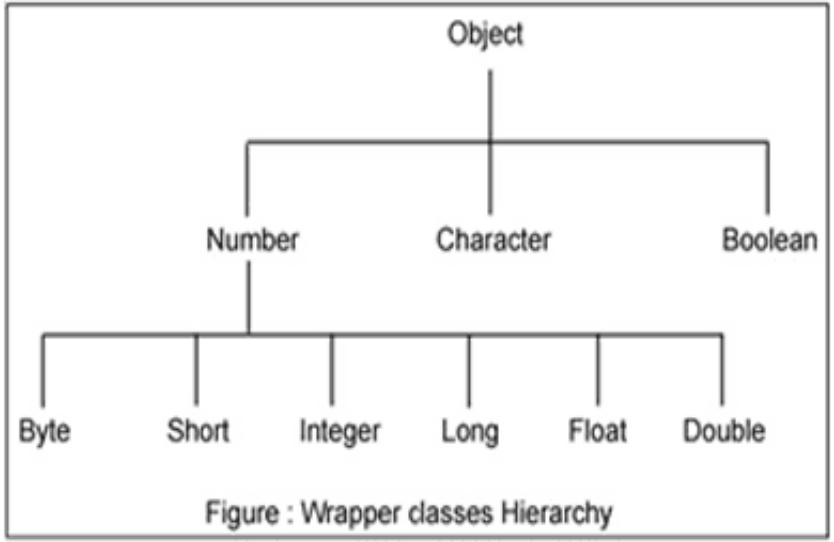

Figure : Wrapper classes Hierarchy

Integer classi methodlari

parseInt(s)	int compareTo(int i)
toString(i)	static int compare(int num1, int num2)
byteValue()	boolean equals(Object intObj)
doubleValue()	valueOf(),
floatValue()	toHexString()
intValue()	toOctalString()
shortValue()	toBinaryString()
longValue()	

String to int

```
String mString = "42";

int mInt = Integer.parseInt(mString);
```

int to String

```
int number = 1;

// yomon variant
String numberString = "" + number;


// yaxshi variant
String str = Integer.toString(number);
String numberString = String.valueOf(number);
```

String to long

```
long x = Long.parseLong("100");
```

long to String

```
long number = 1;

// плохой вариант
String numberString = "" + number;


// отличный вариант
String numberString = String.valueOf(number);
 String str = Long.toString(number);
```

```
//sekin
Integer i = new Integer(100);
Long l = new Long(100);
String s = new String("A");

//tez
Integer i = Integer.valueOf(100);
Long l = 100L;//это тоже самое что Long.valueOf(100L); String s = "A";
```

String to float

```
float x = Float.parseFloat("19.95");
```

String to double

```
double x = Double.parseDouble("19.95");
```

java.lang.Math

Constants

Math.E - having a value as **2.718281828459045**

Math.PI - having a value as **3.141592653589793**

Basic methods

Method	Description	Arguments
abs	Argumentning absalyut qiymatini qaytaradi	Double, float, int, long
round	Argumentni yaxlitlab int yoki long qiymat qaytaradi	double or float
ceil	Argumentdan kichik yoki teng butun son qiymatini qaytaradi	Double
floor	Argumentdan katta yoki teng butun son qiymatini qaytaradi	Double
min	Ikkita argumentdan kichigini qaytaradi	Double, float, int, long
max	Ikkita argumentdan kattasini qaytaradi	Double, float, int, long

Exponential and Logarithmic methods

Method	Description	Arguments
exp	Argumentning e asosga ko’ra natural logarifmini qaytaradi	Double
Log	Argumentning natural logarifmini qaytaradi	double
Pow	Birinchi argumentning birinchi argument darajasini qaytaradi	Double
Sqrt	Argumentning kvadrat ildizini qaytaradi	Double

Trigonometric methods

Method	Description	Arguments
sin	Sin ni hisoblash	Double
cos	Cos ni hisoblash	double
tan	Tangensni hisoblash	Double
toDegrees	Radianni darajaga o’girish	Double
toRadians	Darajani radianga o’girish	Double

Method	Description
random()	0 dan 1 gacha bo’lgan tasodifiy son generasiya qilish;
signum(double d)	Ishorani aniqlash: agarda argument manfiy son bo’lsa -1.0, 0 ga teng bo’lsa 0, musbat son bo’lsa 1.0 qaytaradi
rint(double a)	int ga yaxlitlash
scalb(float f, int scaleFactor)	$f \times 2^{scaleFactor}$ ni hisoblash
subtractExact(int x, int y)	2 ta sonni ayirish. Agarda natija 4 byte dan oshsa xatolik yuz beradi.
toIntExact(long value)	long toifa ni int toifaga ga o’girish. Bunda long toifa qiymati int toifa qiymatlar diapazonida bo’lmasa xatolik yuz beradi.
multiplyExact(int x, int y)	2 ta sonni ko’paytirish. Agarda natija 4 byte dan oshsa xatolik yuz beradi.
decrementExact(int a)	a ning derementini aniqlash. Natija int toifa qiymatlar diapazonida bo’lmasa xatolik yuz beradi.
incrementExact(int a)	a ning incrementini aniqlash. Natija int toifa qiymatlar diapazonida bo’lmasa xatolik yuz beradi.