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## BIGTNITEGER & BIGDECIMAL

BigInteger

BigInteger class is used for the mathematical operation which involves very big integers calculations that are outside the limits of all available primitive data types

Key-Points

Arbitary Precision - Can represent integers of any size, limited only by available memory

Immutable - Operations on BigInteger returns new BigInteger
Objects; the original object remains unchanged.

Wide Range of Operations - supports arithmetic, bituise,

operations other mathematical

who was the survey

Object

La java.lang.Number.

La java.math.BigInteger

extends number to

implements, comparable

flam minister minister

Entrance Cherry marks a presented

Contract to the second second

Constructors

BigInteger bi- new BigInteger (String Val);

Constructs a BigInteger from a etning representation.

BigInteger bi = new BigInteger (String val, int radix);

Constructs a BigInteger from a string representation in the specified base (radix).

Contracted to the second of the

BigInteger bi - nem BigInteger (Int num Bits, Random md);

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	constructs a randomly generated BigInteg	ger with th	Je .
	specified bit length		
		435 31715	
	Big Integer bi new Biginteger Cint bitteng	th, int cort	ainhy
- 1	Random md);		
	constructe a probable prime Bigintegent N	ith the spe	cified
	bit length.		
		- 1917-1	
	Methods	of week of the	
	Arithmetic Operations		
	add (BigInteger val)	Wester District	
	Subtraut (Bigintegen vai)		
	multiply (BigInteger vai)	south at it	
	divide (Biginteger voi)		
	mod (BigInteger Val)		
	Bituise Operations:		
_	and (BigInteger Val)		
	or (BigInteger Val)		
_	xor (Bigloreger Val)		
	not (BigInte)		
	Shiff(eff (inth);		
	Shift-Right (int n)		
		20120120120	
	Companison		
	compare To (BigInteger val)		
	equals (object obj)		
	A substitution of the second s		
	Others:		
	ged (BigInteger voi);		
	is Probable Prime Cibt certainty		
	next Probable Prime()	in the state	

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BigDecimal

BigDecimal is a class that provides support for arbitary-precision floating point numbers. It is used for precision
calculation especially important in financial and scientific
application where accuracy is crucial.

Key-Points

Arbitrary Precision - can represent decimal numbers of any Size and precision.

Immutable - Operations on 'Big Decimal' returns new Big Decimal
Objects the original object remains unchanged.

Charles Charles Trans 1 1 2 hours 194

The state of the second and the second secon

Rounding Modes - Provide various munding modes such as
HALF-UP, HALF-DOWN, CEILING, FLOOR etc.

A signature	Object	MILION ST
alond with	La Java, lang, Number	i i
	4 Java, math. BigDecimal	
white of betterm	extends number &	45.0
	implements comparable	

Constructors and your phone of and - quality and

BigDecimal bd - new BigDecimal (string val);
Constructs a BigDecimal from a string representation

BigDecimal bd = new BigDecimal (BigInteger val);
Constructs a BigDecimal from a BigInteger.

Big Decimal bd + new Big Decimal (double val);

and - I am a way and a decided by the second

Constructs a Bigoecimal from a double (note use: Bigoeuma).
Volue OF (double) to avoid precision issues.)

The state of the s

Big beilmal bal - new Bighecimal (int val); Constructs a Bighecimal from integer

Page No.: Date: Methods tradicadeig Arithmetic Operations add (Bigpecimal val) Submart (BigDecimal Val) multiply (Bigoecimal yal) divide (Bignerimal val) reminder (Big Decimal vai) of out of water pow (Bigneamal val) Comparison! compare To (BigDecimal val) equals (Object obj) Scale / Precision: 19 900 Set Score (int newscale) 70 MAH precision () Rounding: 10010 divide (BigDecimal divisor, Intercale, Rounding Mode munding Mode) setscale (int new scale, Rounding Mode munding Mode); alquinomes series comparat Rounding Modes Rounding Mode. UP - Rounds away from zero Rounding Mode Down Rounds towards zero Rounding Mode. Celunian Rounds Howard positive infinity Rounding Mode, Floor - Rounds toward negative infinity Rounding Mode HALF UP - Rounds towards hearest neighbor uniece both neighbor are equivalent diete In which case munds up Rounding Mode: HALF DOWN-Rounds towards nearcer neighbor unless both neighbor equidistant In which case munds down Rounding Mode, HALF EVEN Rounds towards nearest neighbor unlers both neighbor are equidistant In which case munds toward even neigh