

1004 Lab1 Writeup

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Q1

Output:

ARX2R5A1187FB5B85B	Ann Nesby	90s
ARX2R5A1187FB5B85B	Ann Nesby	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby	american
ARX2R5A1187FB5B85B	Ann Nesby	black gospel
ARX2R5A1187FB5B85B	Ann Nesby	christian
ARX2R5A1187FB5B85B	Ann Nesby	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby	disco
ARX2R5A1187FB5B85B	Ann Nesby	disco house
ARX2R5A1187FB5B85B	Ann Nesby	diva
ARX2R5A1187FB5B85B	Ann Nesby	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby	georgia
ARX2R5A1187FB5B85B	Ann Nesby	gospel
ARX2R5A1187FB5B85B	Ann Nesby	industrial
ARX2R5A1187FB5B85B	Ann Nesby	pop
ARX2R5A1187FB5B85B	Ann Nesby	r&b
ARX2R5A1187FB5B85B	Ann Nesby	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby	soul
ARX2R5A1187FB5B85B	Ann Nesby	soulful house
ARX2R5A1187FB5B85B	Ann Nesby	southern soul
ARX2R5A1187FB5B85B	Ann Nesby	spiritual
ARX2R5A1187FB5B85B	Ann Nesby	united states
ARX2R5A1187FB5B85B	Ann Nesby	urban
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	90s
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	american
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	black gospel
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	christian
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	disco
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	disco house
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	diva
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	georgia
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	gospel
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	industrial
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	pop
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	r&b
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	soul
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	soulful house
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	southern soul
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	spiritual

ARX2R5A1187FB5B85B	Ann Nesby / Al Green	united states
ARX2R5A1187FB5B85B	Ann Nesby / Al Green	urban
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	90s
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	american
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	black gospel
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	christian
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	disco
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	disco house
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	diva
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	georgia
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	gospel
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	industrial
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	pop
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	r&b
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	soul
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	soulful house
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	southern soul
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	spiritual
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	united states
ARX2R5A1187FB5B85B	Ann Nesby / Big Mike	urban
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	90s
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	american
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	black gospel
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	christian
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	disco
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	disco house
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	diva
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	georgia
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	gospel
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	industrial
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	pop
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	r&b
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	soul
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	soulful house
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	southern soul
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	spiritual
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	united states
ARX2R5A1187FB5B85B	Ann Nesby / Jamecia Bennett	urban
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	90s
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	american
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	black gospel
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	christian
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	disco
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	disco house
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	diva
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	georgia
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	gospel

ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	industrial
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	pop
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	r&b
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	soul
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	soulful house
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	southern soul
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	spiritual
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	united states
ARX2R5A1187FB5B85B	Ann Nesby / James "Big" Jim Wright	urban
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	90s
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	american
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	black gospel
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	christian
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	disco
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	disco house
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	diva
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	georgia
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	gospel
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	industrial
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	pop
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	r&b
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	soul
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	soulful house
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	southern soul
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	spiritual
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	united states
ARX2R5A1187FB5B85B	Ann Nesby / Ricky Dillard / New G	urban
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	90s
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	adult contemporary
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	american
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	black gospel
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	christian
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	contemporary gospel
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	disco
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	disco house
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	diva
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	female vocalist
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	georgia
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	gospel
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	industrial
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	pop
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	r&b
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	singer—songwriter
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	smooth soul
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	soul
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	soulful house
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	southern soul
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	spiritual
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	united states
ARX2R5A1187FB5B85B	Ann Nesby; Shirley Caesar	urban
AREPD8D1187FB3F5BC	Sister Hazel	00s
AREPD8D1187FB3F5BC	Sister Hazel	90s
AREPD8D1187FB3F5BC	Sister Hazel	acoustic

AREPD8D1187FB3F5BC	Sister Hazel	alternative
AREPD8D1187FB3F5BC	Sister Hazel	alternative dance
AREPD8D1187FB3F5BC	Sister Hazel	alternative pop rock
AREPD8D1187FB3F5BC	Sister Hazel	alternative rock
AREPD8D1187FB3F5BC	Sister Hazel	american
AREPD8D1187FB3F5BC	Sister Hazel	american trad rock
AREPD8D1187FB3F5BC	Sister Hazel	blues
AREPD8D1187FB3F5BC	Sister Hazel	chill-out
AREPD8D1187FB3F5BC	Sister Hazel	christian rock
AREPD8D1187FB3F5BC	Sister Hazel	christmas music
AREPD8D1187FB3F5BC	Sister Hazel	classic rock
AREPD8D1187FB3F5BC	Sister Hazel	country
AREPD8D1187FB3F5BC	Sister Hazel	country rock
AREPD8D1187FB3F5BC	Sister Hazel	disco
AREPD8D1187FB3F5BC	Sister Hazel	easy listening
AREPD8D1187FB3F5BC	Sister Hazel	electronic
AREPD8D1187FB3F5BC	Sister Hazel	emo
AREPD8D1187FB3F5BC	Sister Hazel	folk
AREPD8D1187FB3F5BC	Sister Hazel	folk rock
AREPD8D1187FB3F5BC	Sister Hazel	funk
AREPD8D1187FB3F5BC	Sister Hazel	grunge
AREPD8D1187FB3F5BC	Sister Hazel	house
AREPD8D1187FB3F5BC	Sister Hazel	indie
AREPD8D1187FB3F5BC	Sister Hazel	indie pop
AREPD8D1187FB3F5BC	Sister Hazel	indie rock
AREPD8D1187FB3F5BC	Sister Hazel	instrumental
AREPD8D1187FB3F5BC	Sister Hazel	male vocalist
AREPD8D1187FB3F5BC	Sister Hazel	new wave
AREPD8D1187FB3F5BC	Sister Hazel	pop
AREPD8D1187FB3F5BC	Sister Hazel	pop rock
AREPD8D1187FB3F5BC	Sister Hazel	post-grunge
AREPD8D1187FB3F5BC	Sister Hazel	progressive rock
AREPD8D1187FB3F5BC	Sister Hazel	punk
AREPD8D1187FB3F5BC	Sister Hazel	rock
AREPD8D1187FB3F5BC	Sister Hazel	singer-songwriter
AREPD8D1187FB3F5BC	Sister Hazel	ska
AREPD8D1187FB3F5BC	Sister Hazel	soft rock
AREPD8D1187FB3F5BC	Sister Hazel	soundtrack
AREPD8D1187FB3F5BC	Sister Hazel	southern rock
AREPD8D1187FB3F5BC	Sister Hazel	stoner rock
AREPD8D1187FB3F5BC	Sister Hazel	trip hop
AREPD8D1187FB3F5BC	Sister Hazel	video game music

Q2

Output:

Cantata 147
 Bung
 A Lonely World
 Pamet versus River of Shit
 Une lumi  re qui rassure
 Demons at Work
 Summer Song (LP Version)
 Old Friend
 Groovejet (If This Ain't Love)
 What Could Be More Beautiful?
 Animal
 The Fact

Mina FÃ¶rers Hall
 Las Manos Del Mundo
 The Girl Next Door
 Ready For Love
 Whatcha Got
 Disco Rocker
 Air Force blue
 Biatch Interlude
 Zillertaler Hochzeitsmarsch
 Sonnerie Jamel Debbouze (Imitation)
 Can't Take My Eyes Off Of You
 This Morning
 Two Faced Promises
 Bernard Lavilliers [En Public]
 Lay This On You
 Ultraviolence
 Toys Room Combat
 Little bit further
 Danzonete "Rompiendo La Rutina
 Toyota
 Pida Me la
 JÃ¶germarsch
 Antimovimiento
 Get Down
 Te Necesito (Directo 2003)
 Ghetto Religion
 LibÃ©rÃ©e
 El Muchacho Alegre (Album Version)
 East Side Drop
 Blueprint For Destruction of Earth
 Fanfare fÃ¼r den faulen Trompeter Version A
 Cure For The Common Heartache
 Make It Work
 Carta De Amor
 You Can't Fix Stupid
 Shoreless
 Song 1 04-23-1988
 Busta Beat
 Dark Eyes — Schwarze Augen
 Naked Hands
 Mi nostalgia
 Gmari
 Algun dia
 Touch Me
 Round And Round
 Rabbit_ Skunk
 La Pitologa
 Un Dia A La Vez
 Mal Amor
 That'll Do It
 I'm Gonna Live Some Before I Die
 In The Bleak Midwinter
 Le creux des rÃªves
 Malinka
 Mi Bohio — Original
 Little Girl of Mine
 Clockwise
 You Rock My World (In The Style Of 'Michael Jackson')
 Fuck Wid Swiss

Thelisi Rama
 Florida (Move Your Feet)
 My Babies
 My Man_ He's a Lovin' Man (Live Version)
 Like They Say
 Green Lights [Remastered version]
 Flickery Vision
 Si Me Queres VendrÃ©
 The Promise (As Made Famous by When in Rome) (ReMixed)
 Tanja
 Caribbean Clipper
 The Freshman 15
 Speculations
 Hey Remember
 ErzÃ¶hl mir von ihr
 If a bwoy box you (Remixed by Lowki)
 Hoy Quisiera
 Make The Grade
 Tienen Un Problema
 Setting Sun (2003 Digital Remaster) (Feat. Noel Gallagher)
 You And I (80 Classic Mix)
 Auch ich hab' dich gern
 All U Got
 Writer's Block
 One Shot [Live From Madison Square Garden]
 Love Is Pleasing
 Cantate 247
 La bonne Ã©toile
 Cherokee
 I Wanna Love You Forever
 Mama You've Been On My Mind / A Fraction of Last Thoughts On Woody Guthrie
 Asi Te Quiero
 pb&j
 Se Sensation
 Senegal to Senatobia
 El Mundo Es Mio
 Fanfare fÃ¼r den faulen Trompeter Version B
 Bright Eyes
 Mambo n 5
 Super Trip 3000
 Coloured Dreams
 Horn Launch
 Hair
 La Rumba Dels 60
 Avalon
 Grey Skies
 Du bist die Richtige
 The Letter (Edited)
 Iupi_ia!
 El aburrido
 Above All (Album)
 The First Time Ever I Saw Your Face
 Cuando Pienso En Ti
 You Can Hurry Up
 Static [Live in Tokyo_ Japan_ February 5_ 2002]
 Pig Meat Is What I Crave
 Hot Stepper
 Ignition x's 4
 El Padrino

Love Theme
 De Repente
 Freshness Emergency (Album Version)
 The Gypsy
 Caruba
 Binary Shuffle (Intro)
 Welcome To The Revolutions
 Universal Love
 Träume sterben
 La Danza De Las Sombras
 Nostalgia — Original
 John The Revelator (Boosta Edit)
 The Poisoning
 Cosimha Ii
 They Who Enter Caves
 Una Rosa Espanola — Original
 The Promise (As Made Famous by When in Rome) (NRG Remix)
 Safari (Holden Remix)
 Blacc Balled
 2nd 13
 Cachorro nu
 Mi Sombrero Sabanero (Version de Radio)
 Choral aus Kantate 147
 What'cha Know About
 One Dream (Original Mix)
 Friestail
 Short Squeaky Cartoon Kiss
 Holy
 I ll Take You There
 Keep It Inside
 Summer Sun (Bailey's Filter Remix)
 Untitled
 Sixième Ätage (Live)
 L'homme Ä La Moto (Live Ä L'Olympia 1956)
 Discolights
 Afro—Cuban Lullaby
 My New Philosophy (From "You're A Good Man_ Charlie Brown")
 She Anuh Ready Gal
 Discoshit
 Bright Moments (Excerpt)
 Ain't That Peculiar
 Thinking Of A Mansion (Intro)
 Cavaquinho
 ISDN
 Gimme No Lip (Live)
 On And On

Q3

Output:

TRAKWOH12903CAC17F
 TRPYBPX128F92FDF95
 TRLJLIL12903CD516A
 TRCKDAY128F932BFED
 TRPOOUQ128F932C026
 TRVMPIJ128F933F1B2
 TRYFVOC128F934C56F
 TRYIBOA128F935835A

TRIXVHI12903CCB809
TRGWXQX128F92EF946

Q4

Output:

00s alternative
15th century
16th century
1910s
19th century classical composer
19th century opera
20th century period
21st century classical composer
60s british rock
60s girl pop
70s hard rock
70s psychedelia
80s dance
80s glam
80s indie pop

Q5

Output:

The George Benson Quartet

Q6

mean=249.71338394213936

Q7

Output:

TRAAAAK128F9318786
TRAAAAV128F421A322
TRAAAAW128F429D538
TRAAAAY128F42A73F0
TRAAABD128F429CF47
TRAAACN128F9355673
TRAAACV128F423E09E
TRAAADJ128F4287B47
TRAAADT12903CCC339
TRAAADZ128F9348C2E

Q8

Without indexing: 1.0013251304626465
With indexing: 0.10371518135070801

The query speeds up significantly with indexing.

Q9

Number of tracks before ROLLBACK: 796212
Number of tracks after ROLLBACK: 866475