

## SQL command

```
DROP FUNCTION IF EXISTS recommendation(time,time,varchar,int,float,float,float)
```

Query executed OK, 0 rows affected. (0.007 s) [Edit](#)

```
DROP FUNCTION IF EXISTS recommendation_helper(time,time,varchar,int,float,float,float)
```

Query executed OK, 0 rows affected. (0.001 s) [Edit](#)

```
CREATE OR REPLACE FUNCTION
    recommendation_helper(fromtime time
        , totime time
        , inputstation varchar
        , topk int
        , w1 float, w2 float, w3 float) RETURNS VARCHAR AS $$
BEGIN
    RETURN 'Inputs: ' || fromtime::varchar(5) || ' ' || totime::varchar(5) || ' / ' || inputstation || ' / ' || topk::varchar || ' / ' || w1::varchar || ' ' || w2::varchar || ' ' || w3::varchar ;
END ;
$$ LANGUAGE plpgsql
```

Query executed OK, 0 rows affected. (0.006 s) [Edit](#)

```
DROP TABLE IF EXISTS songsimilarity
```

Query executed OK, 0 rows affected. (0.006 s) [Edit](#)

```
CREATE TABLE songsimilarity(
    songid      int
    , songname   text
    , artistname text
    , songscore  float
)
```

Query executed OK, 0 rows affected. (0.011 s) [Edit](#)

```
CREATE OR REPLACE FUNCTION
    recommendation(fromtime time
        , totime time
        , inputstation varchar
        , topk int
        , w1 float, w2 float, w3 float)
    RETURNS SETOF songsimilarity AS $recommendation$
DECLARE
    myrow songsimilarity%rowtype ;
BEGIN

    -- The function to get the corresponding songid within the time period and in that station
    DROP TABLE IF EXISTS songsplayed;
    CREATE TABLE songsplayed AS
    SELECT DISTINCT p.songid as songid
    FROM playedonradio p
    WHERE p.station = inputstation and p.playedtime::TIME >= fromtime AND p.playedtime::TIME <= totime;

    -- Write to the table get all songs except previous ones
    DROP TABLE IF EXISTS songsnosuchtime;
    CREATE TABLE songsnosuchtime AS
    SELECT DISTINCT s.id as songid FROM songs s
    EXCEPT SELECT DISTINCT ss.songid FROM songsplayed ss;

    -- The function which is to calculate the gs score

    CREATE OR REPLACE FUNCTION gs(reali...
```

Query executed OK, 0 rows affected. (0.006 s)

```
select * from recommendation(time '08:00',time '10:00', 'mai', 10,1,0,0)
```

songid	songname	artistname	songscore
63674	Undecided	Chris Brown	49
6304	Be Careful	Cardi B	46
8008	Bodak Yellow	Cardi B	46
39344	Money	Cardi B	46
15065	Don't	Bryson Tiller	41
12067	Controlla	Drake	40
21868	God's Plan	Drake	40
22074	Good As Hell	Lizzo	40
29595	In My Feelings	Drake	40
31524	Juice	Lizzo	40
42251	Nonstop	Drake	40
62978	Truth Hurts	Lizzo	40
6102	Barbie Dreams	Nicki Minaj	39
11036	Chun-Li	Nicki Minaj	39
34228	Let You Love Me	Rita Ora	39
34690	Lights Down Low	MAX	39
38933	Mine	Bazzi	39
44769	Paradise	Bazzi	39
54826	Starships	Nicki Minaj	39
69638	Your Song	Rita Ora	39
46661	Promiscuous	Nelly Furtado	38
854	5200	ScHoolboy Q	35
14619	Disturbia	Rihanna	35
42579	Numb Numb Juice	ScHoolboy Q	35
26881	I Gotta Feeling	Black Eyed Peas	34

songid	songname	artistname	songscore
40446	My House	Flo Rida	34
49668	Run Up (feat. PARTYNEXTDOOR & Nicki Minaj)	Major Lazer	34
57186	Taki Taki (feat. Selena Gomez, Ozuna & Cardi B)	DJ Snake	34
8405	Bounce Back	Big Sean	33
28976	If I Can't Have You	Shawn Mendes	33
29586	In My Blood	Shawn Mendes	33
38424	Mercy	Shawn Mendes	33
41136	Nervous	Shawn Mendes	33
50677	Scars To Your Beautiful	Alessia Cara	33
55205	Stitches	Shawn Mendes	33
61031	There's Nothing Holdin' Me Back	Shawn Mendes	33
62767	Treat You Better	Shawn Mendes	33
67396	Wild Thoughts (feat. Rihanna & Bryson Tiller)	DJ Khaled	33
39760	Motivation	Normani	32
63971	Uproar	Lil Wayne	32
10974	Christmas (Baby Please Come Home)	Mariah Carey	31
42693	O Holy Night	Mariah Carey	31
44940	Party Up	DMX	31
55944	Summertime Magic	Childish Gambino	31
61292	This Is America	Childish Gambino	31
628	2002	Anne-Marie	29
1521	A Thousand Years	Christina Perri	29
3714	Always Remember Us This Way	Lady Gaga	29
4964	Attention	Charlie Puth	29
5680	Back To You	Selena Gomez	29
5738	Bad At Love	Halsey	29
5847	Bad Romance	Lady Gaga	29
7316	Birthday	Anne-Marie	29
8586	Break Up Song	Little Mix	29
9456	Cake By The Ocean	DNCE	29
12092	Cool	Jonas Brothers	29
12296	Counting Stars	OneRepublic	29
14322	Didn't I	OneRepublic	29
15122	Don't Call Me Up	Mabel	29
16523	Easier	5 Seconds of Summer	29
20193	Fresh Eyes	Andy Grammer	29
22564	Graveyard	Halsey	29
22628	Green Light	Lorde	29
23513	Havana	Camila Cabello	29
23582	Have Yourself A Merry Little Christmas	Sam Smith	29
25253	Homemade Dynamite	Lorde	29
25726	How Do You Sleep?	Sam Smith	29
25761	How Long	Charlie Puth	29
27110	I Like Me Better	Lauv	29
28108	I'll Be There	Jess Glynne	29
28573	I'm Not The Only One	Sam Smith	29
30107	Into You	Ariana Grande	29
30344	Issues	Julia Michaels	29
31565	July	Noah Cyrus	29
34080	Let Me	ZAYN	29
34465	Liar	Camila Cabello	29
35814	Lose You To Love Me	Selena Gomez	29
36870	Lush Life	Zara Larsson	29
37521	Malibu	Miley Cyrus	29
39254	Modern Loneliness	Lauv	29
39715	Mother	Charlie Puth	29
41325	Never Worn White	Katy Perry	29
41516	Nice To Meet Ya	Niall Horan	29
41619	Nightmare	Halsey	29
42002	No Promises (feat. Demi Lovato)	Cheat Codes	29
42041	No Shame	5 Seconds of Summer	29
43123	Old Me	5 Seconds of Summer	29
43771	Only Human	Jonas Brothers	29
45287	Perfect Places	Lorde	29
48236	Rescue Me	OneRepublic	29
49576	Ruin My Life	Zara Larsson	29
50316	Santa Tell Me	Ariana Grande	29
51094	Selfish	Madison Beer	29
52943	Slide Away	Miley Cyrus	29
53015	Slow Hands	Niall Horan	29
53114	Smile	Katy Perry	29
54162	Sorry Not Sorry	Demi Lovato	29
54987	Stay With Me	Sam Smith	29
55520	Strip That Down	Liam Payne	29
55691	Sucker	Jonas Brothers	29
56498	Sweet Melody	Little Mix	29
56684	Symphony (feat. Zara Larsson)	Clean Bandit	29
57164	Take Yourself Home	Troye Sivan	29
57562	Teeth	5 Seconds of Summer	29
57672	Tell Me You Love Me	Demi Lovato	29

songid	songname	artistname	songscore
58104	That's What I Like	Bruno Mars	29
61246	This City	Sam Fischer	29
61445	This Town	Niall Horan	29
62317	Too Good At Goodbyes	Sam Smith	29
66448	When I Was Your Man	Bruno Mars	29
67428	Wildflower	5 Seconds of Summer	29
67732	Without Me	Halsey	29
68203	Wrong Direction	Hailee Steinfeld	29
69538	Youngblood	5 Seconds of Summer	29
69827	break up with your girlfriend, i'm bored	Ariana Grande	29
55609	Stunnin' (feat. Harm Franklin)	Curtis Waters	25
710	3 Nights	Dominic Fike	24
8013	Body	Loud Luxury	24
8023	Body (feat. brando)	Loud Luxury	24
10701	Cheap Thrills	Sia	24
12991	DNA.	Kendrick Lamar	24
15348	Don't Let Me Down (feat. Daya)	The Chainsmokers	24
15495	Don't Start Now	Dua Lipa	24
21956	Gold	Kiara	24
23069	Hallucinate	Dua Lipa	24
24491	Hey Brother	Avicii	24
28850	IDGAF	Dua Lipa	24
34444	Levitating	Dua Lipa	24
35501	Lonely Together (feat. Rita Ora)	Avicii	24
38341	Memories (feat. Kid Cudi)	David Guetta	24
39396	Money Trees	Kendrick Lamar	24
39635	More Than You Know	Axwell /\ Ingrosso	24
40704	My Way	Calvin Harris	24
41409	New Rules	Dua Lipa	24
42564	Nuh Ready Nuh Ready (feat. PARTYNEXTDOOR)	Calvin Harris	24
42850	Ocean (feat. Khalid)	Martin Garrix	24
45733	Play Date	Melanie Martinez	24
49277	Rollin (feat. Future & Khalid)	Calvin Harris	24
49413	Roses (feat. ROZES)	The Chainsmokers	24
52941	Slide (feat. Frank Ocean & Migos)	Calvin Harris	24
55961	Sun Comes Up (feat. James Arthur)	Rudimental	24
59140	The Greatest (feat. Kendrick Lamar)	Sia	24
59803	The Nights	Avicii	24
61061	These Days (feat. Jess Glynne, Macklemore & Dan Caplen)	Rudimental	24
62132	Together	Sia	24
64731	Waiting For Love	Avicii	24
64754	Wake Me Up	Avicii	24
1680	ATM	J. Cole	23
29426	Immortal	J. Cole	23
30048	Intentions	Justin Bieber	23
31973	KOD	J. Cole	23
39142	Mistletoe	Justin Bieber	23
42028	No Role Modelz	J. Cole	23
54151	Sorry	Justin Bieber	23
65942	What Do You Mean?	Justin Bieber	23
24601	Hey Ya!	Outkast	22
3508	All of Me	John Legend	21
28967	If I Ain't Got You	Alicia Keys	21
6864	Best Day Ever	Mac Miller	20
13313	Dang! (feat. Anderson .Paak)	Mac Miller	20
32400	Killshot	Eminem	20
33246	Ladders	Mac Miller	20
48747	River (feat. Ed Sheeran)	Eminem	20
51083	Self Care	Mac Miller	20
60069	The Real Slim Shady	Eminem	20
67730	Without Me	Eminem	20
902	7 Minutes	Dean Lewis	19
2028	Adore You	Harry Styles	19
6294	Be Alright	Dean Lewis	19
7594	Blank Space	Taylor Swift	19
11016	Christmas Tree Farm	Taylor Swift	19
28853	IDK You Yet	Alexander 23	19
34697	Lights Up	Harry Styles	19
36429	Love Story	Taylor Swift	19
36625	Lover	Taylor Swift	19
37688	Maniac	Conan Gray	19
50638	Say You Won't Let Go	James Arthur	19
51477	Shake It Off	Taylor Swift	19
55640	Style	Taylor Swift	19
62666	Train Wreck	James Arthur	19
65248	Watermelon Sugar	Harry Styles	19
66070	What Makes You Beautiful	One Direction	19
67420	Wildest Dreams	Taylor Swift	19
69834	cardigan	Taylor Swift	19
7677	Blinding Lights	The Weeknd	18

songid	songname	artistname	songscore
9564	Call Out My Name	The Weeknd	18
9741	Can't Feel My Face	The Weeknd	18
11123	Circles	Post Malone	18
21739	Go Flex	Post Malone	18
23947	Heartless	The Weeknd	18
26689	I Fall Apart	Post Malone	18
46779	Psycho (feat. Ty Dolla \$ign)	Post Malone	18
47604	Ransom	Lil Tecca	18
48153	Reminder	The Weeknd	18
50279	Sanguine Paradise	Lil Uzi Vert	18
59236	The Hills	The Weeknd	18
66932	White Iverson	Post Malone	18
68157	Wow.	Post Malone	18
6443	Beat It	Michael Jackson	17
7232	Billie Jean	Michael Jackson	17
30845	It's You	Ali Gatie	17
61563	Thriller	Michael Jackson	17
39217	Mo Bamba	Sheck Wes	15
67794	Woah	Lil Baby	15
910	7 Years	Lukas Graham	14
5812	Bad Liar	Imagine Dragons	14
6756	Believer	Imagine Dragons	14
6972	Better Not (feat. Wafia)	Louis The Child	14
8966	Bruises	Lewis Capaldi	14
11002	Christmas Lights	Coldplay	14
13075	Daisy	Ashnikko	14
15066	Don't	Ed Sheeran	14
15618	Don't Wanna Know	Maroon 5	14
20644	Galway Girl	Ed Sheeran	14
21541	Give Me Love	Ed Sheeran	14
24169	Hello	Adele	14
25007	Hold Me While You Wait	Lewis Capaldi	14
28729	I'm Yours	Jason Mraz	14
34007	Let Her Go	Passenger	14
34035	Let It Go	James Bay	14
34112	Let Me Down Slowly	Alec Benjamin	14
35337	Location	Khalid	14
36412	Love Someone	Lukas Graham	14
38336	Memories	Maroon 5	14
41819	No Idea	Don Toliver	14
45056	Payphone	Maroon 5	14
45270	Perfect	Ed Sheeran	14
45414	Photograph	Ed Sheeran	14
46842	Pumped Up Kicks	Foster The People	14
47402	Radioactive	Imagine Dragons	14
48526	Right Back	Khalid	14
51136	Send My Love (To Your New Lover)	Adele	14
52078	Shotgun	George Ezra	14
53770	Someone Like You	Adele	14
53794	Someone You Loved	Lewis Capaldi	14
55739	Sugar	Maroon 5	14
56143	Supalonely	BENEE	14
57073	Take Me To Church	Hozier	14
58162	The A Team	Ed Sheeran	14
61383	This Love	Maroon 5	14
61631	Thunder	Imagine Dragons	14
66068	What Lovers Do (feat. SZA)	Maroon 5	14
66323	Whatever It Takes	Imagine Dragons	14
66574	When We Were Young	Adele	14
68398	Yellow	Coldplay	14
68408	Yellow Hearts	Ant Saunders	14
69261	You're Beautiful	James Blunt	14
69830	bury a friend	Billie Eilish	14
69869	everything i wanted	Billie Eilish	14
69923	ilomilo	Billie Eilish	14
69971	my future	Billie Eilish	14
55798	Suge	DaBaby	13
19555	Follow God	Kanye West	12
55546	Stronger	Kanye West	12
3481	All Time Low	Jon Bellion	10
21673	Glorious (feat. Skylar Grey)	Macklemore	10
22178	Good Old Days (feat. Kesha)	Macklemore	10
33336	Lalala	Y2K	10
43154	Old Town Road	Lil Nas X	10
44731	Paper Planes	M.I.A.	10
48467	Ride It	Regard	10
53776	Someone Said	Swae Lee	6
3173	All Girls Are The Same	Juice WRLD	4
11009	Christmas Time	Bryan Adams	4
36770	Lucid Dreams	Juice WRLD	4

songid	songname	artistname	songscore
344	(You Make Me Feel Like) A Natural Woman	Aretha Franklin	0
2299	Ain't No Sunshine	Bill Withers	0
4698	Around the World	Daft Punk	0
4711	Arrows	Foo Fighters	0
5603	Back In Black	AC/DC	0
5785	Bad Decisions	The Strokes	0
7117	Big For Your Boots	Stormzy	0
7434	Black Hole Sun	Soundgarden	0
7560	Blah Blah Blah	Armin van Buuren	0
7620	Bleed It Out	Linkin Park	0
8044	Body Like A Back Road	Sam Hunt	0
8569	Break My Stride	Matthew Wilder	0
9634	Camelot	NLE Choppa	0
10681	Chasing Cars	Snow Patrol	0
11403	Cochise	Audioslave	0
12419	Crawling	Linkin Park	0
13221	Dancin (feat. Luvli) - Krono Remix	Aaron Smith	0
14395	Dig Down	Muse	0
15514	Don't Stop Believin'	Journey	0
15819	Down	Marian Hill	0
16191	Driving Home for Christmas	Chris Rea	0
18199	Faded	Alan Walker	0
18222	Faint	Linkin Park	0
18713	Feel It Still	Portugal. The Man	0
18869	Fell On Black Days	Soundgarden	0
19912	Fortunate Son	Creedence Clearwater Revival	0
20091	Free Fallin'	Tom Petty	0
20808	Genocidal Humanoidz	System Of A Down	0
23055	Hallelujah	Pentatonix	0
23986	Heathens	Twenty One Pilots	0
24548	Hey Look Ma, I Made It	Panic! At The Disco	0
24708	High Hopes	Panic! At The Disco	0
25870	Human	Rag'n'Bone Man	0
27456	I Saw Mommy Kissing Santa Claus	The Jackson 5	0
27790	I Want You Back	The Jackson 5	0
27939	I Won't Back Down	Tom Petty	0
28890	Ice Cream (with Selena Gomez)	BLACKPINK	0
30255	Is It True	Tame Impala	0
31292	Jingle Bell Rock	Bobby Helms	0
31479	Joy To The World	Nat King Cole	0
31633	Jumpsuit	Twenty One Pilots	0
32960	La Dee Da	Foo Fighters	0
33445	Last Christmas	Wham!	0
35322	Lo/Hi	The Black Keys	0
36573	Love\$ick (feat. A\$AP Rocky)	Mura Masa	0
36612	Lovefool	twocolors	0
36616	Lovely Day	Bill Withers	0
38464	Merry Xmas Everybody	Slade	0
39925	Mr. Blue Sky	Electric Light Orchestra	0
39928	Mr. Brightside	The Killers	0
41334	Nevermind	Dennis Lloyd	0
42573	Numb	Linkin Park	0
43595	One More Time	Daft Punk	0
43667	One Step Closer	Linkin Park	0
43701	One Too Many	Keith Urban	0
44437	Own It (feat. Ed Sheeran & Burna Boy)	Stormzy	0
44742	Papercut	Linkin Park	0
46724	Protect The Land	System Of A Down	0
47830	Realize	AC/DC	0
48245	Respect	Aretha Franklin	0
48453	Ride	Twenty One Pilots	0
49128	Rockin' Around The Christmas Tree	Brenda Lee	0
49609	Run	Foo Fighters	0
49618	Run For Cover	The Killers	0
49743	Runnin' Down A Dream	Tom Petty	0
50439	Saturnz Barz (feat. Popcaan)	Gorillaz	0
50580	Say It (feat. Tove Lo)	Flume	0
51293	Seven Nation Army	The White Stripes	0
52037	Shooting Stars	Bag Raiders	0
52073	Shot In The Dark	AC/DC	0
52484	Simmer	Hayley Williams	0
52806	Skin	Rag'n'Bone Man	0
52919	Sleigh Ride	Ella Fitzgerald	0
53106	Smells Like Teen Spirit	Nirvana	0
53964	Somewhere I Belong	Linkin Park	0
54562	Spoonman	Soundgarden	0
55065	Step Into Christmas	Elton John	0
55497	Stressed Out	Twenty One Pilots	0
56098	Sunset Lover	Petit Biscuit	0
56419	Sweet Caroline	Neil Diamond	0

songid	songname	artistname	songscore
56457	Sweet Home Alabama	Lynyrd Skynyrd	0
59021	The Gambler	Kenny Rogers	0
59078	The Git Up	Blanco Brown	0
60279	The Sky Is A Neighborhood	Foo Fighters	0
61140	Think	Aretha Franklin	0
61492	Thought Contagion	Muse	0
61934	Tints (feat. Kendrick Lamar)	Anderson .Paak	0
63828	Unsainted	Slipknot	0
64574	Vossi Bop	Stormzy	0
65926	What Christmas Means To Me	Stevie Wonder	0
66003	What I've Done	Linkin Park	0
67573	Winter Wonderland	Bing Crosby	0
67933	Wonderwall	Oasis	0
69092	You Shook Me All Night Long	AC/DC	0
69757	Zombie	The Cranberries	0

360 rows (4.050 s) [Edit](#), [Warnings](#), [Explain](#), [Export](#)

```
DROP FUNCTION IF EXISTS recommendation(time,time,varchar,int,float,float,float);
DROP FUNCTION IF EXISTS recommendation_helper(time,time,varchar,int,float,float,float);

CREATE OR REPLACE FUNCTION
    recommendation_helper(fromtime time
        , totime time
        , inputstation varchar
        , topk int
        , w1 float, w2 float, w3 float) RETURNS VARCHAR AS $$
BEGIN
    RETURN 'Inputs: '||fromtime::varchar(5)||' '||totime::varchar(5)||' / '||inputstation||' / '||topk::varchar||' / '||w1::varchar||' '||w2::varchar||' '||w3::var
END ;
$$ LANGUAGE plpgsql ;

DROP TABLE IF EXISTS songsimilarity;

CREATE TABLE songsimilarity(
    songid      int
    , songname   text
    , artistname text
```

Limit rows:  ☐ Stop on error ☐ Show only errors

[History](#)