

# Doğal dil projesi rapor

Projede, en sık geçen 20 kelimeyi collections kütüphanesinin counter fonksiyonuyla belirledim. Ayrıca, Word2Vec kullanarak bu 20 kelimeye benzer 5 kelimeyi saptadım. Aşağıda belirtilen kütüphaneleri kullanarak rastgele seçtiğim 5 cümleye benzer 3 cümle bulma adımında ise TfidfVectorizer ve cosine\_similarity metriklerini kullanmayı tercih ettim.

## En çok geçen 20 kelime:

covid: 1803 kez  
new: 529 kez  
people: 526 kez  
cases: 506 kez  
deaths: 356 kez  
us: 354 kez  
pandemic: 341 kez  
vaccine: 308 kez  
health: 288 kez  
get: 270 kez  
like: 257 kez  
dont: 217 kez  
still: 215 kez  
one: 213 kez  
many: 182 kez  
vaccines: 178 kez  
total: 174 kez  
vaccinated: 171 kez  
would: 167 kez  
time: 165 kez

## En benzer 5 farklı kelimeler

kelime\_analizi.py dosyasının çıktısı aşağıdaki gibidir: covid

kelimesine benzer kelimeler:

people: 0.9980438351631165

us: 0.9980133175849915

pandemic: 0.9977877140045166

like: 0.9977747201919556

one: 0.9976652264595032

new kelimesine benzer kelimeler:

day: 0.9907505512237549

deaths: 0.9874858260154724

today: 0.9846656322479248

covid: 0.984281599521637

reported: 0.9828744530677795

people kelimesine benzer kelimeler:

covid: 0.9980437755584717

pandemic: 0.9975391626358032

would: 0.9972959160804749

us: 0.9971497654914856

health: 0.9970716834068298

cases kelimesine benzer kelimeler:

deaths: 0.9868499636650085

new: 0.9824338555335999

day: 0.9814876317977905

today: 0.9760556221008301

reported: 0.9733312726020813

deaths kelimesine benzer kelimeler:

new: 0.9874858260154724

day: 0.987414538860321

cases: 0.9868499040603638

pandemic: 0.9853182435035706

today: 0.985115647315979

us kelimesine benzer kelimeler:

covid: 0.9980132579803467

people: 0.9971497058868408

pandemic: 0.9969032406806946

one: 0.9966102242469788

like: 0.9965512156486511

pandemic kelimesine benzer kelimeler:

covid: 0.997787594795227

people: 0.997539222240448

us: 0.9969032406806946

one: 0.9966307282447815

like: 0.9965562224388123

vaccine kelimesine benzer kelimeler:

covid: 0.9973947405815125

like: 0.9969877004623413

people: 0.9967899322509766

time: 0.9967790842056274

many: 0.9963980913162231

health kelimesine benzer kelimeler:

covid: 0.9971373081207275

people: 0.9970716238021851

us: 0.9963895082473755

like: 0.9963625073432922

get: 0.9959485530853271

get kelimesine benzer kelimeler:

covid: 0.9970259070396423

people: 0.9965485334396362

like: 0.9963463544845581

dont: 0.996117115020752

would: 0.996097207069397

like kelimesine benzer kelimeler:

covid: 0.997774600982666

still: 0.9971526265144348

vaccine: 0.996987521648407

people: 0.9969576597213745

one: 0.9967014789581299

dont kelimesine benzer kelimeler:

people: 0.996996283531189

covid: 0.9967563152313232

like: 0.9966878890991211

would: 0.9963042140007019

get: 0.9961171746253967

still kelimesine benzer kelimeler:

covid: 0.9976348876953125

like: 0.9971527457237244

people: 0.9969191551208496

even: 0.9962649345397949  
pandemic: 0.9961618185043335

one kelimesine benzer kelimeler:

covid: 0.9976649880409241  
people: 0.9967107772827148  
like: 0.9967015385627747  
pandemic: 0.9966306686401367  
us: 0.9966101050376892

many kelimesine benzer kelimeler:

covid: 0.997198760509491  
people: 0.9965128898620605  
vaccine: 0.9963980317115784  
pandemic: 0.9962214231491089  
like: 0.9962148666381836

vaccines kelimesine benzer kelimeler:

covid: 0.9963565468788147  
vaccine: 0.9957613945007324  
people: 0.9953745603561401  
like: 0.9951885938644409  
us: 0.9948962330818176

total kelimesine benzer kelimeler:

new: 0.9788808226585388  
reported: 0.9738929271697998  
deaths: 0.9711862802505493  
today: 0.9676193594932556  
day: 0.9666181802749634

vaccinated kelimesine benzer kelimeler:

many: 0.9895797371864319  
vaccine: 0.9891900420188904  
like: 0.988166093826294  
people: 0.9879657030105591  
would: 0.9876643419265747

would kelimesine benzer kelimeler:

people: 0.9972959756851196  
covid: 0.9971023201942444  
one: 0.9965130090713501

dont: 0.9963041543960571

like: 0.9962629675865173

time kelimesine benzer kelimeler:

covid: 0.9969623684883118

vaccine: 0.9967789649963379

like: 0.9963994026184082

people: 0.9963671565055847

pandemic: 0.9963542819023132

## En benzer 3 farklı cümle

cümle.py dosyasının çıktısı:

Orjinal Cümle 1: "test distinguish sarscov influenza b respiratory syncytial virus" (222. cümle)

En Benzer 3 Cümle:

1. (2370. cümle) decided start counting influenza infections influenza clue precovid influenza influenza infection
2. (9104. cümle) protective role combined polyphenols micronutrients influenza virus sarscov infection vitro
3. (9133. cümle) integrated respiratory diseases dashboard tracking respiratory virus activity updated

Orjinal Cümle 2: vaccine attitudes covid vaccine intention among parents children kidney disease primary hypertension(295. cümle)

En Benzer 3 Cümle:

1. (273. cümle) vaccine opinions survey september studied attitudes people indicated hesitancy uncertainty towards getting refused get covid vaccine
2. (7089. cümle) however covid vaccine actual vaccine
3. (455. cümle) would like acknowledge patience parents worked hard protect children waiting vaccine rollout

Orjinal Cümle 3: thought pandemic wasnt real covid trick played pharma(368. cümle)

En Benzer 3 Cümle:

1. (3105. cümle) wasnt funny thought would
2. (2630. cümle) vaccines manufacturers played havoc
3. (8490. cümle) wasnt covid list

Orjinal Cümle 4: efficacy safety prophylaxis systematic review metaanalysis randomized trials(582. cümle)

En Benzer 3 Cümle:

1. (101. cümle) results consistent analysis randomized trials hospitalized patients
2. (6916. cümle) parenchymal lung abnormalities following hospitalisation covid viral pneumonitis systematic review metaanalysis thoraxbmj
3. (2928. cümle) taking time ensure safety efficacy quality control

Orjinal Cümle 5: ask health care provider treatment(7558. cümle)

En Benzer 3 Cümle:

1. (1650. cümle) test positive covid call health care provider ask treatment options
2. (5179. cümle) soon feel sick talk health care provider visit
3. (2638. cümle) dont provider call covid

## Veri setindeki ilk 100 cümlenin duygu analizi:

Text: 1 mark calendars

Sentiment: 2, Confidence: 0.2685595452785492

Text: 2 covidian cult world like plague threatening everyone

Sentiment: 0, Confidence: 0.37734878063201904

Text: 3 status id

Sentiment: 2, Confidence: 0.274911105632782

Text: 4 reboot post pandemic

Sentiment: 1, Confidence: 0.2432985156774521

Text: 5 plot admissions diagnoses vs deaths

Sentiment: 0, Confidence: 0.2706371247768402

Text: 6 well anyone paying attention also

Sentiment: 1, Confidence: 0.2937726676464081

Text: 7 remember told wed well keep covid deaths k today found k died march june care homes following unlawful policy im sure still defend govt deny

Sentiment: 0, Confidence: 0.6868210434913635

Text: 8 equaling severe sickness

Sentiment: 1, Confidence: 0.2764244079589844

Text: 9 debt deficits tripled b covid thanks u treasurer followed dunce kooyong

Sentiment: 0, Confidence: 0.582563579082489

Text: 10 one week rotation months december last year company lower literacy sites need physical support guys

Sentiment: 0, Confidence: 0.45860156416893005

Text: 11 stuck bed ill spending days

Sentiment: 1, Confidence: 0.3503963053226471

Text: 12 people biohazard suits due covid

Sentiment: 0, Confidence: 0.39774081110954285

Text: 13 new tool cojac early detection genomic surveillance sarscov including low frequency potentially emerging variants

Sentiment: 3, Confidence: 0.3284643590450287

Text: 14 biden deliberately overwhelmed us million disease ridden illegals refugees

Sentiment: 0, Confidence: 0.6987576484680176

Text: 15 essay one difficult things ever written

Sentiment: 2, Confidence: 0.23944076895713806

Text: 16 wheres wreath kristinoem

Sentiment: 1, Confidence: 0.2650350332260132

Text: 17 take care

Sentiment: 2, Confidence: 0.29167118668556213

Text: 18 objective evaluations smell taste acuity guide appropriate management treatment post patients persistent sensory distortion according new data

Sentiment: 3, Confidence: 0.29742398858070374

Text: 19 isnt invisible menace face

Sentiment: 1, Confidence: 0.32815787196159363

Text: 20 university students faculty staff members campus community tested positive july march

Sentiment: 0, Confidence: 0.46876564621925354

Text: 21 information call

Sentiment: 2, Confidence: 0.26259884238243103

Text: 22 hats volunteers read names todays week covid remembrance action

Sentiment: 4, Confidence: 0.39964088797569275

Text: 23 people start wearing crowded areas especially deal new wave infections fuelled new disease health minister brigitte bourguignon said monday

Sentiment: 0, Confidence: 0.6796907782554626

Text: 24 dont take care health experiencing malnutrition fact health deteriorate

Sentiment: 0, Confidence: 0.45077359676361084

Text: 25 part musk demands f leech public property remove freedom others personal access every resource needed function productively

Sentiment: 4, Confidence: 0.293049693107605

Text: 26 cases fall presence ever decreasing mask wearing find great humor watching seeing tweets still trying somehow justify use public health interventions ridicule removal mandated use

Sentiment: 0, Confidence: 0.5884349346160889

Text: 27 click buy

Sentiment: 2, Confidence: 0.2446298748254776

Text: 28 remember get vaccinated stay home family sick get tested help slow spread  
Sentiment: 0, Confidence: 0.4996935725212097

Text: 29 barrington coasts destination marketing launched  
Sentiment: 0, Confidence: 0.2648793160915375

Text: 30 finland seems best employment rate years shelves full shops  
Sentiment: 4, Confidence: 0.23262052237987518

Text: 31 covid show continues relevant interesting  
Sentiment: 3, Confidence: 0.2852588891983032

Text: 32 parliamentarians time thieves  
Sentiment: 1, Confidence: 0.27127909660339355

Text: 33 information call wellness coalition  
Sentiment: 2, Confidence: 0.27435675263404846

Text: 34 listen jag club madness interview tv informer  
Sentiment: 0, Confidence: 0.2519243657588959

Text: 35 good day  
Sentiment: 2, Confidence: 0.28512969613075256

Text: 36 mild covid liberal tune destroying sacrifices since  
Sentiment: 0, Confidence: 0.32173049449920654

Text: 37 omicron surges contact tracers face unexpected problem much less work wsj rpts  
Sentiment: 0, Confidence: 0.47017550468444824

Text: 38 public health failure people think covid wont kill someone love  
Sentiment: 0, Confidence: 0.5558201670646667

Text: 39 team working diligently remain goto trusted provider vaccinations boosters  
Sentiment: 4, Confidence: 0.40548738837242126

Text: 40 everyone right highquality masks w enough disposable income purchase  
Sentiment: 4, Confidence: 0.31555110216140747

Text: 41 seems long way pecking order  
Sentiment: 1, Confidence: 0.32554957270622253

Text: 42 sup educ grants abbvie janssenus ferring takedapharma lilly  
Sentiment: 3, Confidence: 0.266622394323349

Text: 43 greghuntmp healthcaregov victoriancho said take vaccination holy grail opening  
economy without restrictions reduction infections  
Sentiment: 0, Confidence: 0.35420310497283936

Text: 44 clifford hofferd chofferd  
Sentiment: 1, Confidence: 0.2565097510814667



Text: 45 still running health workers firefighters military administrative refused experimental injection longer paid forbidden work rights days  
Sentiment: 0, Confidence: 0.6068729162216187

Text: 46 loser forced believe science get vaccinated  
Sentiment: 0, Confidence: 0.5232416987419128

Text: 47 cumulative number cases  
Sentiment: 2, Confidence: 0.2991209924221039

Text: 48 must every single mutation ever  
Sentiment: 4, Confidence: 0.33287855982780457

Text: 49 okay affidavit saying covid vaccines contain key ingredient used antifreeze considered toxic humans  
Sentiment: 2, Confidence: 0.3671635091304779

Text: 50 new study shows unvaccinated covid patients less infectious vaxxed  
Sentiment: 0, Confidence: 0.34188440442085266

Text: 51 united states statistics  
Sentiment: 2, Confidence: 0.3067503273487091

Text: 52 may ons covid infection survey  
Sentiment: 1, Confidence: 0.3102215528488159

Text: 53 face masks fascism  
Sentiment: 1, Confidence: 0.282294899225235

Text: 54 total active cases  
Sentiment: 1, Confidence: 0.30087926983833313

Text: 55 people nasty  
Sentiment: 1, Confidence: 0.35324037075042725

Text: 56 new cases  
Sentiment: 1, Confidence: 0.28282710909843445

Text: 57 like let covid older folks die  
Sentiment: 1, Confidence: 0.26729846000671387

Text: 58 new death per  
Sentiment: 1, Confidence: 0.2969604432582855

Text: 59 didnt tweet much pandemic idea whether effective rona  
Sentiment: 0, Confidence: 0.3859463930130005

Text: 60 could help track tweet elon musk said fauci source covid ngo  
Sentiment: 0, Confidence: 0.3683551251888275

Text: 61 cancercausing chemical found sunscreen products  
Sentiment: 0, Confidence: 0.30129969120025635

Text: 62 data provisional change frequently

Sentiment: 2, Confidence: 0.30510345101356506

Text: 63 yesterday missourians recorded dead

Sentiment: 0, Confidence: 0.3856775164604187

Text: 64 latest report

Sentiment: 2, Confidence: 0.2681654691696167

Text: 65 hi everyone

Sentiment: 1, Confidence: 0.290897011756897

Text: 66 yanjiao town near locked due

Sentiment: 1, Confidence: 0.34521156549453735

Text: 67 canadian occurring pandemic demonstrated disruptive compounding putting communities increased risk decreased priority

Sentiment: 0, Confidence: 0.4926053583621979

Text: 68 dr pope notes probably going get fifth shot fallstay tuned guess

Sentiment: 0, Confidence: 0.4153420925140381

Text: 69 alexberenson vs pierrekory

Sentiment: 0, Confidence: 0.2737552225589752

Text: 70 canton street

Sentiment: 1, Confidence: 0.2767908275127411

Text: 71 growth us confirmed covid deaths county al covid visualizations give insight covid thanks data scientists usafacts

Sentiment: 3, Confidence: 0.25705552101135254

Text: 72 still travel standing one place

Sentiment: 1, Confidence: 0.29059427976608276

Text: 73 love twitter

Sentiment: 1, Confidence: 0.27144625782966614

Text: 74 two weeks booster came week misery month lassitude

Sentiment: 0, Confidence: 0.575214684009552

Text: 75 sit nothing making sure youre wearing virus porous mask

Sentiment: 0, Confidence: 0.5210534930229187

Text: 76 thank much covering important topic cynthiamcfadden

Sentiment: 2, Confidence: 0.24772430956363678

Text: 77 richard summerfield explores talent retention age great resignation fwwmagazines march cover story

Sentiment: 4, Confidence: 0.3152007758617401

Text: 78 also buy hold coviddogs rewards

Sentiment: 4, Confidence: 0.2291925847530365

Text: 79 th day alert level quarantine c body temperature spo bpm pulse bp

Sentiment: 0, Confidence: 0.22402846813201904

Text: 80 presenters able present remotely  
Sentiment: 3, Confidence: 0.23969466984272003

Text: 82 munching watermelon tea lays  
Sentiment: 1, Confidence: 0.2966792583465576

Text: 83 catching would serious outcome  
Sentiment: 1, Confidence: 0.3474313020706177

Text: 84 point im making current mrna covid vaccines designed code response thats spike proteins  
Sentiment: 3, Confidence: 0.27293887734413147

Text: 85 earn bitcoin browsing cryptotab  
Sentiment: 0, Confidence: 0.36016929149627686

Text: 86 coercive manipulation  
Sentiment: 2, Confidence: 0.24779148399829865

Text: 87 awesome place holds special place vail  
Sentiment: 4, Confidence: 0.4365083575248718

Text: 88 still exhausted  
Sentiment: 1, Confidence: 0.34603697061538696

Text: 89 fully vaccinated  
Sentiment: 1, Confidence: 0.2648468017578125

Text: 90 china pentagon darpa coordination wuhan virology lab come eventually  
Sentiment: 2, Confidence: 0.24204958975315094

Text: 91 greatest country earth  
Sentiment: 2, Confidence: 0.25193703174591064

Text: 92 rwanda uganda  
Sentiment: 1, Confidence: 0.311398446559906

Text: 93 new study published erspublications pulse oximeter measurements blood oxygen levels may unreliable assess severity across different ethnicities infectdisnews medicineun  
Sentiment: 0, Confidence: 0.3543967306613922

Text: 94 created determines covid  
Sentiment: 2, Confidence: 0.271411657333374

Text: 95 returning teach ff spring break rise  
Sentiment: 0, Confidence: 0.2994909882545471

Text: 96 pretty much scientists though  
Sentiment: 2, Confidence: 0.3396594226360321

Text: 97 years anyone said fauci mandates politically motivated labeled conspiracy theorist  
Sentiment: 0, Confidence: 0.6952553987503052

Text: 98 afraid life never

Sentiment: 1, Confidence: 0.2939322888851166

Text: 99 four years term hes still talking train delays

Sentiment: 0, Confidence: 0.316682904958725

Text: 100 work share stories pacific learners impacted pandemic

Sentiment: 0, Confidence: 0.2674310505390167