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Deep Learning Assignment 3

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Introduction

The aim of this assignment is to build a Recurrent Neural Network (RNN) and apply it to a real-world dataset. The objective is to generate lyrics based on a given melody. During the training phase, the model will learn from the provided lyrics. In the test phase, it will generate lyrics using only the melody.

Pre-processing

Preprocessing involves a few steps:

- 1. Organizing the data frame according to singer, song's name and lyrics.
- 2. Removing specific characters, expanding common contractions to their full forms.
- 3. Creating a fourth column with the name of the midi file which correspond to the song and singer.
- 4. Creating our own vocabulary, tokenization, which includes creating index to word and word to index of all the different words in songs of our training. The vocabulary consisted of 7356 words.

Model

Model's objective

The overall goal is to generate a song. We use our model to predict word by word. The model gets as an input a combination of word embeddings after pre-processing (300-dimensional GloVe embeddings) and MIDI features and predict the next word.

Model's modes

We used two approaches for integrating the melody information into the model:

Mode 1:

The MIDI features are represented as a 23-dimensional vector, designed to capture both a comprehensive set of musical characteristics and general features of the song. The following features are included:

- Tempo: the overall tempo of the song, estimated in beats per minute (BPM), is represented as a single value. This captures the speed at which the music is played.
- Tempi statistics: this is the plural form of "tempo" and refers to multiple tempos within a piece of music or across different pieces. Features including minimum, maximum, mean and std.
- Chroma features: represents the 12 different pitch classes averaged over the duration of the song. This captures the harmonic content of the music.
- Chroma Statistics: including minimum, maximum, mean and std.
- Beats: including mean beat duration and the number of beats.

Mode 2:

The MIDI features are represented as a 145-dimensional vector, focus on capturing specific aspects of the musical instruments.

The following features are included:

- Piano Roll: A piano roll matrix representing the average velocity of each of the 128 possible pitches over time. This provides a detailed view of the note intensities played across different pitches.
- Number of instruments: This feature counts the total number of different instruments present in the MIDI file. It provides information about the diversity of timbres used in the song.

Also, for each instrument, pitch, velocity, control number statistics, and control value statistics are calculated separately. Then, statistical features are computed across all the instruments, including minimum, maximum, mean and std.

- Pitch: the perceived frequency of a sound.
- Velocity: the speed at which a note is played, affecting its loudness or intensity.
- Control number statistics: metrics related to the various continuous controllers used in a musical performance.
- Control value statistics: the numerical values assigned to different control changes.

For conclusion, model 1 focuses on capturing general musical characteristics and overall song features through a smaller set of integrated metrics, while model 2 provides a detailed and instrument-specific analysis with a larger set of features, including individual instrument statistics.

Model architecture:

As shown in Figure 1, the model utilizes two stacked GRU layers. Each GRU layer has a hidden state size of 128. Then we have two subsequent linear layers. The first linear with dropout with a probability of 0.5 is used and ReLU activation function. Finally, the second linear layer transforms the output from the previous linear layer to match the vocabulary size, producing logits for the next word prediction.

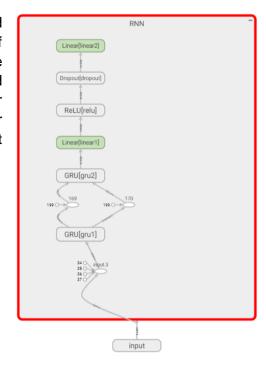


Figure 1: The network architecture

Training

We split our data which was consisted of 600 songs into: train (85%) and validation (15%).

After running the models with different parameters and different number of epochs we picked the next hyper parameters:

Optimizer: Adam.Learning rate: 1e-4.

Loss function: cross entropy.

Num epochs:mode 1- 10 epochs, mode 2-7 epochs.

Dropout: 0.5.

Teacher forcing

During training we used teacher forcing which is a training technique used in sequence-based models, particularly in Recurrent Neural Network. In teacher forcing Instead of using the model's own predictions as inputs for the next step, teacher forcing feeds the *actual* target output (the correct word, in the case of language modeling) from the training data into the model at each step.

Training the model:

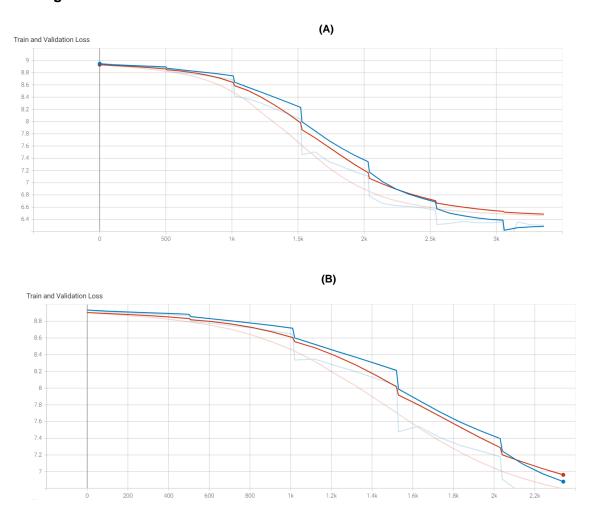


Figure 2: Loss curves: (A) and (B) represent the loss curves of mode 1 and 2 respectively. The red curve represents the train's loss and the blue curve represent the validation's loss.

We observe that for both figures, the model using mode 1 (which utilizes general features of the song) achieves a lower loss compared to the loss curves of mode 2. Additionally, we notice that for both modes, the training and validation loss curves decrease together, indicating that the model is learning effectively and not overfitting.

Test:

Our test data consists of 5 songs. For each song, we extracted features according to mode 1 or mode 2 and ran the model, starting with a predetermined first word. We observed how this initial word influenced the generated song. The mechanism for selecting the next word is non-deterministic. Specifically, the next word is chosen randomly from a list of the top 10 words with the highest probability, based on the model's prediction. The generated text is 100 words long, with a maximum of 7 words per line.

The initial words we chose are: 'war', 'l', and 'apple'. The generated songs can be found in the Appendices. We selected 'l' as our prevalent word, and chose 'war' and 'apple' as two words with distinct semantic meanings to observe the differences in the generated content.

Example for one song for mode 1 (left) and mode 2 (right):

song name: The Bangles- Eternal Flame war zu first respond reviled reviled donner sets romancer reluctantly public saved first stranglin' stranglin' respond saved snowbird reluctantly steed stranglin' sets reviled ink ink sets reviled public respond stranglin' sets 'though spaces sets saved snowbird reluctantly reviled donner conscience public zu ink sets stranglin' lawsuit conscience ink parts parts respond conscience conscience donner respond snowbird lasts lawsuit ink first reviled respond 'though 'though first snowbird 'though donner public first saved reluctantly respond donner ink steed sets first ink lasts ink lasts donner donner ink first public saved donner reluctantly snowbird conscience steed 'though conscience 'though first first reluctantly lawsuit sets.

song name: The Bangles- Eternal Flame war eve crazy jersey trigger doorstep refined bags drive by kid quick lands hoo marriage jersey quick mirrors refined bags bags marriage crazy sleighing bags sleighing mirrors souls lucky lands Walkin jersey lands kid jersey refined quick driveby factor lands sleighing lowly lucky lucky sleighing jersey sleighing walkin mirrors lucky craazy mirrors hoo hoo bags driveby quick catacombs marriage jersey kid trigger trigger walkin refined mirrors souls factor lucky walkin sleighing lucky refined lucky catacombs jersey lowly walkin lucky kid refined trigger walkin marriage mirrors trigger sis sleighing quick mirrors kid driveby marriage souls quick sleighing lands sleighing sis hoo lucky driveby

Discussion

The comparative evaluation of the two models, both employing the same underlying architecture, reveals differences in their performance, primarily due to the variations in the MIDI feature inputs. Mode 1 uses a 23-dimensional vector representing general musical characteristics, while Mode 2 utilizes a more detailed 145-dimensional vector capturing specific aspects of musical instruments. We observe that Mode 1 achieves a lower loss compared to Mode 2. Furthermore, for both modes, the training and validation loss curves decrease together, indicating effective learning and minimal overfitting. However, the models do not perform well on the test set. This may be attributed to the fact that the loss did not fully converge. Additionally, there are issues with word connectivity during the song generation, and some words are repeated despite the model's non-deterministic nature. To address these shortcomings, one potential improvement could be to utilize time-sequential music features instead of features representing the entire song. We also experimented with different initial words to see their impact on the generated lyrics. In some cases, using a word with a specific context (e.g., "war") led to the generation of related words (e.g., "slaughter"). This suggests that the initial word could influences the thematic development of the generated song.

Appendices

Mode 1:

The word is: war

song name: The_Bangles- Eternal_Flame

war zu first respond reviled reviled donner sets romancer reluctantly public saved first stranglin' stranglin' respond saved snowbird reluctantly steed stranglin' sets reviled ink ink sets reviled public respond stranglin' sets 'though spaces sets saved snowbird reluctantly reviled donner conscience public zu ink sets stranglin' lawsuit conscience ink parts parts respond conscience conscience donner respond snowbird lasts lawsuit ink first reviled respond 'though 'though first snowbird 'though donner public first saved reluctantly respond donner ink steed sets first ink lasts ink lasts donner donner ink first public saved donner reluctantly snowbird conscience steed 'though conscience 'though first first reluctantly lawsuit sets.

song name: Billy_Joel- Honesty

war addresses gauge populace shores maria schau tammy situation homeless nonono populace shores tammy pr mystery gauge tammy pr gauge jfk situation maria schau driveby gauge populace tammy driveby addresses tammy gauge sequel bee addresses populace gauge gauge jfk pr shores mystery bee cancer populace situation pr habitual populace schau pr addresses schau pr believed cancer nonono shores shores homeless driveby addresses sequel addresses driveby gauge whether gauge mystery mystery cancer believed pr situation believed bee homeless addresses tammy sequel tammy nonono schau jfk tammy driveby schau schau shores habitual believed gauge gauge habitual mystery cancer driveby whether jfk situation sequel

song name: Cardigans- Lovefool

war degenerate frauen guevara lostandfound climbing occupy delicate fire climbing meditation 247 footsteps cancerous guevara degenerate fire ideals delicate ideals sacks lostandfound pennies 247 degenerate footsteps fire cassette ideals plus 247 degenerate fire heavier lostandfound footsteps guevara delicate cancerous meditation cancerous frauen ideals degenerate climbing 247 degenerate 247 frauen wrapped lostandfound lookin' occupy lostandfound lostandfound occupy climbing degenerate pennies cancerous climbing heavier fire cancerous pennies climbing cassette cassette frauen cancerous plus plus ideals meditation heavier footsteps guevara lostandfound footsteps meditation delicate trouppper meditation trouppper meditation delicate ideals degenerate 247 trouppper guevara wrapped occupy delicate lookin' heavier meditation occupy wrapped lostandfound climbing

song name: Aqua- Barbie_Girl

war believed telephone fight y believed huhcall skipping telephone fight graduations maids fight huhcall undefined stroller suspended undefined fight barnes maids scary graduations kept rewind graduations homeless believed skipping fight y huhcall skipping kept y huhcall graduations fight stroller scary astanding maids undefined skipping tried tried scary maids tried suspended tried graduations doors skipping tried believed fight skipping fight graduations rewind narrow astanding barnes suspended astanding believed skipping huhcall kept rewind rewind y homeless homeless homeless maids telephone fight homeless telephone scary huhcall believed telephone maids y fight doors huhcall maids doors scary tried doors fight huhcall y tried maids barnes

song name: Blink_182- All_The_Small_Things

war burden deserve oooh gleam outta oooh gleam hago upstairs favorite rocking rosanna's attracting deserve deserve attracting favorite gleam lavida deserve hago favorite train's oooh attracting sang outta sang goddamn louie train's oooh sang louie hungry hungry outta lavida couple couple louie favorite khartoum attracting rosanna's goddamn goddamn louie sang goddamn hungry favorite rosanna's sang favorite train's gleam strings couple gleam attracting oooh deserve upstairs rocking hungry deserve hago rosanna's favorite favorite rosanna's deserve sang rocking rosanna's favorite goddamn strings lavida favorite khartoum rocking train's strings gleam hungry train's train's oooh favorite sang favorite favorite hago hungry rosanna's strings oooh attracting

The word is: I

song name: The_Bangles- Eternal_Flame

I merengue origami rolling oooh forgot criticize passport snatchin' oooh snatchin' origami snatchin' blistering how's splendid shock merengue market snatchin' places market snatchin' passport oooh blistering passport snatchin' eternal controversy shock merengue oooh criticize usa eternal market gaze oooh bonny splendid criticize snatchin' places criticize usa eternal places snatchin' busta blistering oooh places eternal gaze origami passport gaze eternal shock bonny shock forgot gaze origami criticize shock market passport busta forgot controversy busta snatchin' bonny passport rolling gaze rolling usa usa merengue busta blistering busta gaze criticize rolling eternal controversy usa usa splendid blistering usa places shock shock snatchin' busta how's

song name: Billy_Joel- Honesty

I superstar ends pictures bebebetter respond blinded translate shorts drift translate cute accepted tried translate tried cannibalism translate drift scratch translate yo ends remained cute pictures tried tried scratch superstar ramshackled cute vein offered remained offered shorts remained regrets superstar yo cannibalism scratch ends remained remained remained shorts remained tried remained bebebetter cute offered cannibalism remained respond ramshackled ramshackled tried ramshackled tried yo tried respond blinded blinded ends drift remained ramshackled remained ends vein yo bebebetter scratch cannibalism drift shorts ends tried scratch tried regrets shorts respond ends vein superstar bebebetter offered pictures drift shorts yo drift remained blinded ramshackled offered

song name: Cardigans- Lovefool

I needles dozen dive pinch twilight many wasteland dive tina wasteland colors sloppy tina gary viene needles needles many dozen wasteland wasteland gary yen tina yen yen dozen many asks colors pinch localbound asks twilight gary wasteland stereo restaurant dive orleans dive sloppy sloppy dive viene viene wasteland dive stereo twilight colors tina evangelists dozen asks wasteland twilight dozen needles viene tina yen wasteland

many wasteland sloppy gary evangelists sloppy sloppy yen viene gary stereo stereo evangelists needles orleans bullshit yen wasteland colors many asks gary restaurant dive gary bullshit restaurant dozen restaurant dive many evangelists orleans bullshit twilight restaurant evangelists

song name: Aqua- Barbie_Girl

I emotional twotenth twotenth conscience grain emotional grain real rather goodbying twotenth art rather shit real conscience heavyweight ours real fought sesame ours fought che rather shit che eleven eleven rather shit shit emotional ours ours heavyweight guide twotenth real real rather twotenth ours guide emotional fries real ours esta fries esta conscience fries art twotenth rather skip grain fries skip shit conscience che sweettalkin' sweettalkin' grain emotional emotional art sesame che grain heavyweight shit twotenth twotenth goodbying fries sesame rather fries skip che esta esta shit sweettalkin' eleven conscience eleven rather che fought skip goodbying rather emotional goodbying sweettalkin' twotenth

song name: Blink_182- All_The_Small_Things

I following denver blanket family's beat's blanket family's boody sewed clockwork downers hears boody downers family's breaths sewed beat's hears hears beat's sewed lahaina family's sewed denver heav'n heav'n family's dishes beat's breaths boody downers sewed downers breaths instrument denver lahaina plead tumble blanket hears lahaina boody tumble instrument heav'n beat's family's clockwork band aaron beat's heav'n denver instrument lahaina instrument breaths tumble heav'n denver family's beat's blanket sewed breaths lahaina aaron dishes longhorn instrument blanket downers clockwork heav'n tumble heav'n band boody downers band family's hears longhorn aaron band downers band clockwork clockwork heav'n hears family's band hears downers hears

The word is: apple

song name: The_Bangles- Eternal_Flame

apple this this northern fake debo hump pull hump floors psychiatrist flashbulbs hump this floors fightin' deeper this flashbulbs flashbulbs pull flashbulbs sombra psychiatrist floors northern bread fairy northern psychiatrist legally bread fightin' fake deeper flashbulbs tough sombra this pull bread hump bread sheik cut fake deeper debo floors fightin' flashbulbs fairy sheik northern debo debo sheik tough animal deeper flashbulbs sheik northern hump sombra sombra this pull simple psychiatrist fightin' fairy deeper northern pull animal simple simple fightin' deeper legally tough pull floors cut debo cut floors sombra fightin' flashbulbs pull tough simple fairy sombra debo hump tough hump tough

song name: Billy_Joel- Honesty

apple feeeling estate instrument instantly message intimate instantly climbin' things social there artist's there things artist's resides things recover dimple's grown resides instrument things instrument recover instrument instrument artist's irritates instrument instrument dimple's message intimate doney message feeeling instrument grown instantly artist's grown artist's artist's skip estate resides skip estate there doney pissed pissed estate grown doney intimate message things feeeling feeeling intimate instantly things climbin' message dimple's recover intimate message estate pissed jackanory things social grown dimple's feeeling things doney message skip dimple's message intimate intimate jackanory resides instrument feeeling social message message jackanory instantly resides things grown irritates message

song name: Cardigans- Lovefool

apple ought jerking bullet tryin hear universe bullet twice brakes universe jerking pinching jerking bruise brakes trues ought pinching trues dart monday sharp trues ought dude's jerking dart beckoning jerking bullet twice sharp buckwild somthing ought bullet tryin nice beckoning nice ought dude's dart nice twice twice beckoning dude jerking trues pinching dart nice universe monday somthing beckoning dude beckoning bruise universe tryin buckwild ought brakes tryin sharp buckwild sharp bruise sharp bullet jerking dart hear universe dude's brakes hear nice tryin brakes trues ought twice buckwild dude's bruise trues brakes pinching sharp hear monday bullet twice bullet jerking bruise universe

song name: Aqua- Barbie_Girl

apple rocking james hat prancer sharing rocking dependencies straighten hat replace sharing join james fiery replace straighten orleans orleans superman sharing superman fiery dependencies across join fiery dawn fed rocking bite bite prancer fiery fiery james join sharing winter's across james sail straighten definitely orleans definitely geht dawn orleans definitely join prancer superman fiery dependencies orleans fiery fiery across sail bite straighten bite sharing winter's across james replace dawn sharing replace replace rocking geht superman superman geht fiery bite definitely bite prancer straighten across winter's straighten join across prancer prancer join prancer straighten straighten fed fiery sail across replace fed straighten

song name: Blink_182- All_The_Small_Things

apple crowds wailed fallback coffee enthrone fallback foul solo satan trench solo wailed crowds foul wailed foul coffee don jackanory don biggest crowds enthrone sieeign coffee satan overweight coffee fallback wailed fallback fires satan solo satan don ohoh foul foul jackanory jackanory enthrone foul foul overweight don overweight wailed ohoh boyfriend intrigue crowds satan boyfriend foul overweight satan crowds enthrone solo jackanory biggest wailed fires sieeign don satan foul stall don satan boyfriend biggest foul foul satan intrigue sieeign don biggest sieeign overweight foul satan intrigue fires wailed fallback jackanory stall ohoh ohoh crowds don solo trench sieeign boyfriend wailed ohoh

Mode 2:

The word is: war

song name: The Bangles- Eternal Flame

war eve crazy jersey trigger doorstep refined bags drive by kid quick lands hoo marriage jersey quick mirrors refined bags bags marriage crazy sleighing bags sleighing mirrors souls lucky lands Walkin jersey lands kid jersey refined quick driveby factor lands sleighing lowly lucky lucky sleighing jersey sleighing walkin mirrors lucky craazy mirrors hoo hoo bags driveby quick catacombs marriage jersey kid trigger trigger walkin refined mirrors souls factor lucky walkin sleighing lucky refined lucky catacombs jersey lowly walkin lucky kid refined trigger walkin marriage mirrors trigger sis sleighing quick mirrors kid driveby marriage souls quick sleighing lands sleighing sis hoo lucky driveby

song name: Billy_Joel- Honesty

war bang g'schicht' flash acne ego bartender acne flash flash g'schicht' flash acne dreary bang latex provide ego denn g'schicht' flirting exile frank possibilities exile ev'rytime denn receiving receiving steppin' steppin' dreary exile receiving g'schicht' dreary g'schicht' ev'rytime dreary bang acne ev'rytime ego frank courage ego dreary dreary possibilities frank g'schicht' steppin' ego exile latex exile g'schicht' belongs bartender ego flirting flash belongs courage g'schicht' steppin' denn denn flirting bartender g'schicht' receiving latex denn ego provide direction ev'rytime g'schicht' ev'rytime g'schicht' belongs latex bartender exile g'schicht' g'schicht' g'schicht' belongs flirting dreary denn acne flash exile latex acne denn bartender courage bang

song name: Cardigans- Lovefool

war blitz shakin' weepin' immediately lured bloom flock pequeno upper blitz immediately trumped trumped pequeno immediately upper darkest immediately darkest sister bloom trumped blitz immediately greetings trumped miracles upper flock whinin' flock miracles bunk darkest miracles chest darkest greetings chest immediately darkest whinin' darkest weepin' shakin' whinin' blitz upper southward whinin' immediately flock chest lured flock bunk bunk miracles blitz lured sister greetings bunk upper flock greetings bloom bunk southward sister whinin' greetings bunk sister miracles weepin' upper soul whinin' miracles darkest bunk bunk flock greetings trumped upper immediately lured pequeno chest bloom sister darkest bloom chest trumped southward flock verse

song name: Aqua- Barbie_Girl

war invited sin comfortless bishops absent hoodwink sie eazy twohand breathin' breathin' motorcycle eazy breathin' fool's sin surroundin' hoodwink bishops absent cup sin cup distant sie bishops bail surroundin' fool's camelot fool's afar hoodwink twohand distant surroundin' combination harry camelot fool's twohand hoodwink combination invited sie sin eazy absent hoodwink jeep twohand distant sin cup fool's cup surroundin' afar distant camelot distant breathin' hoodwink absent jeep distant bishops absent bail invited distant twohand eazy comfortless bail camelot bishops combination afar distant invited invited jeep combination invited absent surroundin' bishops afar eazy combination bishops bail surroundin' absent combination jeep hoodwink twohand eazy

song name: Blink_182- All_The_Small_Things

war slaughter deformative values lovesick slaughter yellowhaired swayin' yyyyyowyeah values slaughter swayin' kinda yyyyyyowyeah pistol values swayin' deformative thank thank help gained alleyway gained lovesick slaughter thank values swayin' trouppper thank yyyyyyowyeah kinda yyyyyyowyeah eh trouppper wise help values yyyyyyowyeah gained trouppper swayin' santa's kinda alleyway swayin' repeating thank values slaughter repeating swayin' deformative deformative deformative hell thank sync lovesick swayin' slaughter gained sync swayin' pistol repeating slaughter help santa's gained deformative trouppper deformative swayin' lovesick sync values yyyyyowyeah wise sync help kinda thank slaughter lovesick swayin' kinda help tripped eh yellowhaired pistol wise swayin' slaughter slaughter wise pistol repeating eh

The word is: I

song name: The_Bangles- Eternal_Flame

I doc stayed lung doc pleasin' visions hollow music sticking oftentimes music visions stayed oftentimes t's stayed irene's hollow visions electric hangs pleasin' lyin' disguise lung visions stayed irene's lyin' lung visions stayed irene's disguise lung turning visions disguise visions turning oftentimes lyin' turning sticking hangs t's irene's dear music lyin' hollow irene's hangs sticking dear lyin' turning oftentimes hangs hollow talkin' electric doc hollow doc hollow lung oftentimes music disguise doc irene's music t's pleasin' oftentimes lyin' turning talkin' disguise hollow hollow pleasin' reading irene's hollow visions hangs visions electric pleasin' lyin' hangs bump talkin' dear pleasin' pleasin' talkin' hollow

song name: Billy_Joel- Honesty

I shadys comin electric hardheaded molasses fades letting uphill fria feeling letting feeling what's hardheaded halls letting forever's forever's halls fria depend goodnight depend forever's molasses molasses fria forever's forever's goodnight shadys parental feeling forever's thugging comin molasses shadys shadys bebopalula fades goodnight depend parental depend forever's depend electric fria parental goodnight depend pd molasses uphill bebopalula forever's hardheaded hardheaded fades conductor bebopalula halls goodnight goodnight electric depend halls depend feeling forever's halls letting feeling uphill halls halls conductor uphill uphill what's hardheaded pd electric uphill hardheaded what's bebopalula what's bebopalula shadys bebopalula molasses depend molasses shadys fria forever's molasses bebopalula

song name: Cardigans- Lovefool

I up driveby sunrisethis up shady's cheese grin isolated isolated grip up yield bulge lap driveby thundering crops up grip grip deo yield grin up things things sunrisethis deo up things grin driveby cape driveby yield isolated ideals things ideals thundering thundering isolated grip phone bulge bulge phone grip up deo gun deo gun crops thundering shady's up grip grin lap shady's ideals isolated crops yield shady's yield thundering things driveby bulge lap grip driveby ideals phone cape

cape grin yield crops things grin sunrisethis things gun isolated isolated deo things thundering grin shady's crops yield driveby lap lap driveby gun

song name: Aqua- Barbie_Girl

I ignoring gratitude feeding denn teasetease teasetease teasetease o'clock teaseteasetease ignoring vez berserk teaseteasetease active ignoring voyage teaseteasetease heavens berserk o'clock blonde feeding active o'clock teaseteasetease ignoring gratitude gypsum ignoring voyage gypsum o'clock vez voyage teaseteasetease blonde fashion marathon gypsum denn fashion marathon heavens voyage teaseteasetease orgy blonde denn active marathon orgy badge gratitude many blonde feeding vez many cocked berserk fashion orgy berserk many ignoring feeding cocked gratitude feeding feeding cocked noone orgy badge blonde gypsum cocked orgy vez heavens fashion denn orgy voyage gypsum ignoring voyage teaseteasetease many blonde fashion teaseteasetease teaseteasetease voyage chacha badge gratitude blonde gratitude orgy chacha

song name: Blink_182- All_The_Small_Things

I outer crooked corn manger crooked vietnam praise foods corn donut earn praise popul¤r praise jetzt foods praise popul¤r hears jetzt donut popul¤r corn flickering merece false younger popul¤r corn runway popul¤r vietnam hears earn corn praise righteous flickering vietnam donut chariot merece younger praise crooked manger hears donut praise merece crooked popul¤r righteous popul¤r praise righteous jetzt praise younger jetzt foods foods younger crooked infinito runway flickering corn righteous corn false false verdict praise praise praise runway flickering jetzt donut chariot runway infinito popul¤r verdict manger runway crooked jetzt infinito jetzt merece righteous tear earn praise false merece runway outer

The word is: apple

song name: The_Bangles- Eternal_Flame

apple starts tonsils sit sit misunderstood gates starts
atlanta atlanta crumple sit gates losing crumple
sit assail losing sit starts tonsils losing
sit upstairs crumple fella walls boody hoped
upstairs achtzig gates starts atlanta gates upstairs
walls hoped hoped tests crumple rhythm starts
hoped sit sit boody responsibility hoped walls
starts walls boody boody gates misunderstood sit
responsibility tests hoped atlanta upstairs sit sit
misunderstood misunderstood thousand gates boody sit tests
hoped farm tonsils sit responsibility tests sit
losing responsibility misunderstood crumple responsibility assail losing
assail sit upstairs assail achtzig starts tonsils
assail atlanta responsibility fella farm sit crumple
fella responsibility

song name: Billy_Joel- Honesty

apple start cupid ask eats fading sharp hold it'd everlasting hold pelicans raga whoaohoh raga eats velvet swell sharp raga cutouts drawin' cupid cigarettes question raga cigarettes ask everlasting velvet cigarettes start whoaohoh velvet sharp everlasting insanity raga insanity pelicans temperature sharp temperature question hold swell cigarettes cutouts start hold start hold everlasting start pelicans whoaohoh question start raga velvet cupid drawin' everlasting everlasting start pelicans swell velvet velvet cupid drawin' ask velvet drawin' inclined velvet everlasting pelicans start sharp cupid eats pelicans velvet drawin' cigarettes pelicans drawin' cupid ask hold insanity sorrows velvet it'd sorrows eats sharp sharp insanity cupid

song name: Cardigans- Lovefool

apple west sometimes bars sometimes hully ox erz¤hl' belongs crunch belongs number's drinkin' stacking mariah belongs music ox number's bars belongs sometimes north phone west stacking mariah number's gauge belongs detroit bars drinkin' added mariah crunch gauge cement crunch erz¤hl' sometimes ox stacking bars west gauge ox hully cement bars hully north plane erz¤hl' music gauge north drinkin' mariah crunch stacking north detroit west gauge bars gauge music crunch number's crunch sometimes bars mariah number's stacking plane detroit north phone drinkin' added stacking sometimes north music ox phone detroit plane music ox added plane bars north belongs cement plane music sometimes

song name: Aqua- Barbie_Girl

apple brain's ever noon mirror clint noon enough's two hidden towers two towers loss afternoon pam doin' wrinkled corpse loss time's pam mirror brain's doin' enough's two cleanin' corpse retired time's enough's ho's loss doin' two clint corpse two time's wrinkled loss wrinkled wrinkled brain's ho's clint cleanin' wrinkled afternoon time's two clint corpse towers loss time's enough's cleanin' ho's towers corpse brain's two two two hidden cleanin' ever ever time's retired heel towers hidden brain's two clint enough's afternoon cleanin' corpse two time's wrinkled hidden pam ho's retired corpse ho's clint retired clint heel clint retired afternoon loss war doin'

song name: Blink_182- All_The_Small_Things

apple drag mirror drag reminds affection affection drag description hauled hauled thy metro style's shining 'ey needin' 'ey peace realize metro reminds hauled style's reminds honk affection description hauled needin' blinded thy description gym gym thy fortunes blinded hauled reminds metro drag reminds peace fortunes description shelf shining metro 'ey thy honk ice 'ey hauled drag thy shining gym shining 'ey affection fortunes shining blinded blinded thy thy ice lands shining peace blinded sweety affection lands 'ey description drag shelf 'ey metro reminds honk drag honk 'ey blinded realize style's 'ey thy realize hauled peace hauled style's style's style's