

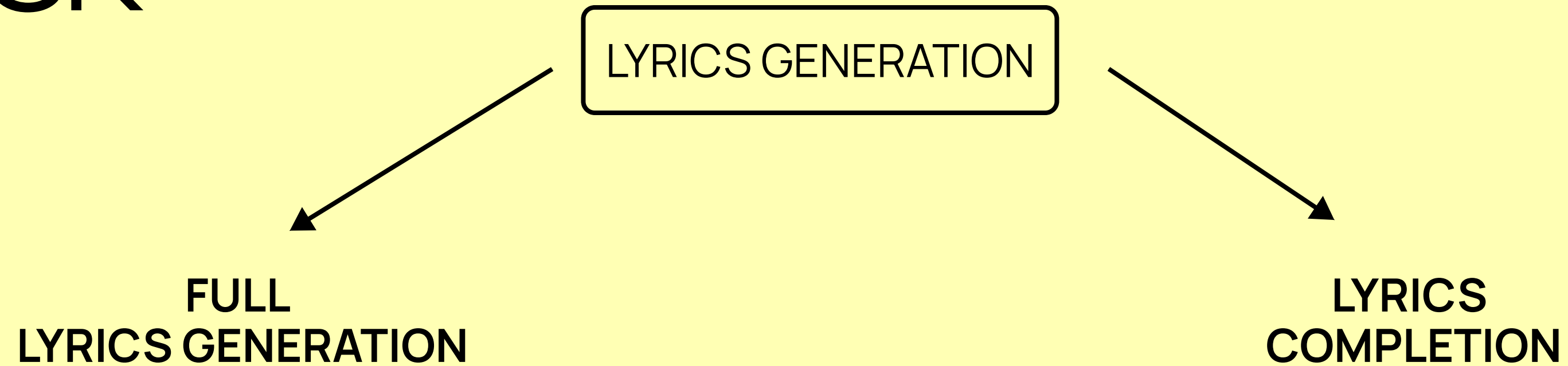
LYRICS GENERATION

DATA MINING PROJECT

→ Simone Teglia, 1836794

→ March 2024

TASK



PROMPT : "Generate lyrics for a rock song"

OUTPUT: "Is this the real life? Is this just fantasy?
Caught in a landslide, no escape from reality
Open your eyes, look up to the skies and see
I'm just a poor boy, I need no sympathy"



Mistral AI



Llama



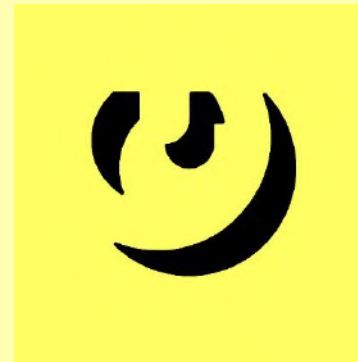
Phi-2

INPUT : "Is this the real life? Is this just fantasy?
Caught in a landslide, no escape from reality"

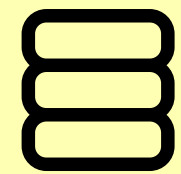
OUTPUT: " Open your eyes, look up to the skies and see
I'm just a poor boy, I need no sympathy"

DATASETS

I scraped the lyrics from the genius.com website
The dataset is available [here](#)



FULL LYRICS GENERATION



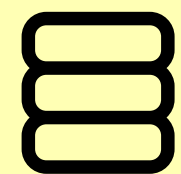
10'000 songs

5 genres: rock, rap, metal, indie, pop

100 artists

BeautifulSoap

LYRICS COMPLETION



Kaggle dataset with Kanye West lyrics
[Link here](#)

[Intro: Ponderosa Twins Plus One & Brenda Lee]

B-B-B-B-Bound to fall in love

Bound to fall in love

Uh-huh, honey

[Chorus: Kanye West, Ponderosa Twins Plus One & Brenda Lee]

All them other niggas lame, and you know it now

When a real nigga hold you down, you s'posed to drown

(Bound to fall in love)

Bound

(B-B-B-B-Bound to fall in love)

Bound

Uh-huh, honey

[Verse 1: Kanye West]

What you doin' in the club on a Thursday?

She say she only here for her girl birthday

They ordered champagne but still look thirsty



FULL LYRICS GENERATION

MODELS

1. TinyLlama/TinyLlama-1.1B-Chat-v.01
2. microsoft/phi-2 (2.7B)

PERFORMANCES WITHOUT TRAINING

PHI-2

with the given title and chord progression. Title: "Rock on" Chord Progression (I-IV - V): C G Am F

Answer: Verse 1:

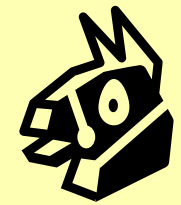
G, D/C#m7 – I'm feeling alive tonight / A guitar solo that makes me feel alright / Nothing can stop us from having fun in this nightlife scene / We're ready to party till it's all done right!

Try Pitch

TINYLLAMA

[Song Lyrics] I'm gonna be your lover, I'm gonna be your friend, I'm gonna be your everything, I'm gonna be your heart. [Verse 1] I'm gonna make you feel so right, I'm gonna make you feel so right, I'm gonna make you feel so right. [Chorus] I'm gonna make you feel so right, I'm gonna make you feel so right, I'm gonna make you feel so right. [Verse 2] I'm gonna make you feel so right, I'm gonna make you feel so right, I'm gonna make you feel so right. [Chorus] I'm gonna make you feel so right, I'm gonna make you feel so right, I'm gonna make you feel so right.

PERFORMANCES AFTER TWO EPOCHS



PROMPT: *"Generate lyrics for a rock song"*

I'm sorry about that; it was just so we could get some rhythm in there but now you got to go back and listen... And do whatever the fuck you want with all those uncompressed samples! That is not how they were recorded or played at all even if they did have wah pedals on top of them! So please don't try this shit out because as soon as your hand touches any part of one sample which has an A/B switch then these are 100% no real-estate for someone who had enough time learn what to play music and that means getting rid of such nuisances from life itself while also learning something new every day of its being made. The thing we wanted most to be happy by saying things like "I hope God has blessed me" or ... 'It's okay.' Let him know exactly when she would rather spend a few minutes before her next example show." He said he loved his parents much more than anything else shown since last couple episodes," both parents told their best husband, partner and children to see recently". She may have already

The model seems to extract some chat that has seen at training time

PROMPT: *"Generate lyrics for a rap song "*

Rap, nigga! You ain't got time to listen like you don't know what I do. It come from real life and that shit goin on behind my back when they make me say things but never even tell the truth 'cause if it was told then would be hurt... so now it is kept under wraps by all of these people who really just want something else which makes some other person feel their pain or whatever... sometimes we wake up in bed talking about why this happened instead of getting past each other until we both start moving forward again

Les de nous estés pas qui maus à notre mal sàr alikk 1 pour que le graph du message lb.
Lastly vous etraîdétracé rég votre sur ring lindre_pile=beikem;si-hisijuraniqqulique#lyrir garabi distriburyg daticulian bustilangan irak gag ik k glass que Laki A Que C Kur B Ist G Mal In Í Grande D Gir Bah Gab Lag Gar
Gálier tini dakıǵ, ٱ ()

PERFORMANCES AFTER TWO EPOCHS

PROMPT: *"Generate lyrics for a rock song"*

OUTPUT

```
.
Input: [Verse 1]
I'm not the one to blame, but I know it's true that you're mine
You've got me in your mind and heart too much of my time
And when we were together there was no way out from under this spell
[Chorus]
It seems like forever now since our last kiss or call
But somehow things are always right with us anyway
So why don't they just let go? Why can't he see how wrong she is?
Why won't he give up on her even though all his friends say so?
Oh yeah! Oh yes! (Yeah!)
No matter what happens, never ever leave me alone again
Never stop thinking about me until I get back home once more
(Don't) Never think twice 'bout leaving without saying goodbye first
'Cause if something bad should happen then at least someone will be sorry
[Outro]
If only life could have been perfect... If only love would stay alive long enough
To make everything worth living through another day
Just wait till tomorrow morning comes around
When maybe someday soon these words might come down loud and clear
"She said "no", oh boy!" And here I am still standing by yours
The same old story over and over yet nothing has changed
Nothing changes except sometimes people change their minds
Sometimes hearts break open wide as tears fall into eyes
Then suddenly everyone knows who really loves whom best
Nowhere else do those feelings feel better than where they belong
Wherever two lovers meet each other every night
They'll find themselves lost inside an endless loop
Of longing thoughts and memories waiting patiently
For some reason deep within them both
Will keep coming back round and round
Until finally somebody says "yes"
At which point...well, well-enough already
That's okay because nobody needs anyone anymore
We'd rather live apart instead of being lonely
Together somewhere far away
In a place called heaven
With angels watching over us while we sleep soundly
Dreaming sweet dreams tonight
While loving ones beside us awake
```

```
[13]:
prompt = "Generate lyrics for a rock song"
pipe = pipeline(task="text-generation", model=model, tokenizer=tokenizer, max_length=
result = pipe(f"### Instruction: {prompt}")
print(result[0]['generated_text'])

/opt/conda/lib/python3.10/site-packages/torch/utils/checkpoint.py:61: UserWarning: None of the inputs have requires_grad=True. Gradients will be None
warnings.warn(
### Instruction: Generate lyrics for a rock song. ### Assistant: [Verse 1]
I'm a man of the world
I'm a man of the world
I'm a man of the world
I'm a man of the world
[Chorus]
I'm a man of the world
I'm a man of the world
I'm a man of the world
I'm a man of the world
[Verse 2]
I'm a man of the world
I'm a man of the world
I'm a man of the world
I'm a man of the world
[Chorus]
I'm a man of the world
I'm a man of the world
I'm a man of the world
I'm a man of the world
[Verse 3]
I'm a man of the world
I'm a man of the world
I'm a man of the world
I'm a man of the world
```

Using repetition-penalty = 1.5

No repetition-penalty parameter
But here it's clearly visible that the model
understood the structure of a song

PERFORMANCES AFTER TWO EPOCHS



PROMPT: *"Generate lyrics for an upbeat rock song"*

[Verse 1]:
I'm feeling so lost
I'm trying to find my way
But I'm running out of time
I'm running out of days
[Verse 2]:
I'm trying to break free
I'm trying to find my way
But I'm running out of time
I'm running out of days
[Chorus]:
I'm running out of time
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days
I'm running out of days

PERFORMANCES AFTER TWO EPOCHS



PROMPT: *"Generate lyrics for an indie song about the sea"*

[Verse 1]

There's nothing more calming than being in some water, I feel like everything is moving slow

Everywhere you look there are waves crashing and it feels so good to be alive (Breeze)

That's how life should always turn out or at least that was my idea when we planned this project (Gotta say yeah)

[Pre-Chorus 2]

Ain't no other time where all of our fears could just melt away with only one breath if you had faith in me, oh god stop trying nothin' 'cause your fear never got us anywhere before now

I want you know what? If God gave ya problems he must think they're pretty important too ('Cause right here we go again)

So don't listen to those who try throw negativity on every word (Look around), but make sure yours come from both sides as well (Ohh)

If someone tell them wrong then show off their mistakes by doing yo own thing instead (Yah!)

And even though these days seem tough sometimes people can still get lost along with them words inside them mind (Mmmm)

You gotta have something bigger and better going forward because let's face facts everyone will die

But do give yourself enough room cause once in history anyone heard any shit nobody ever did anything (Yeah)

Nowadays almost everybody has been tried already, seen through many eyes, run into plenty of trouble getting things done (No doubt)

Everybody knows that certain ways work best while others might fail miserably leaving somebody behind (Uh Huh)

We've learned a lot over last few decades learning new techniques helping break barriers breaking stereotypes

It seems impossible back when young and scared; now watch us grow up faster than an oak tree and become stronger each day! Come play with us soon 'til we build another team together (Ah Yeah)

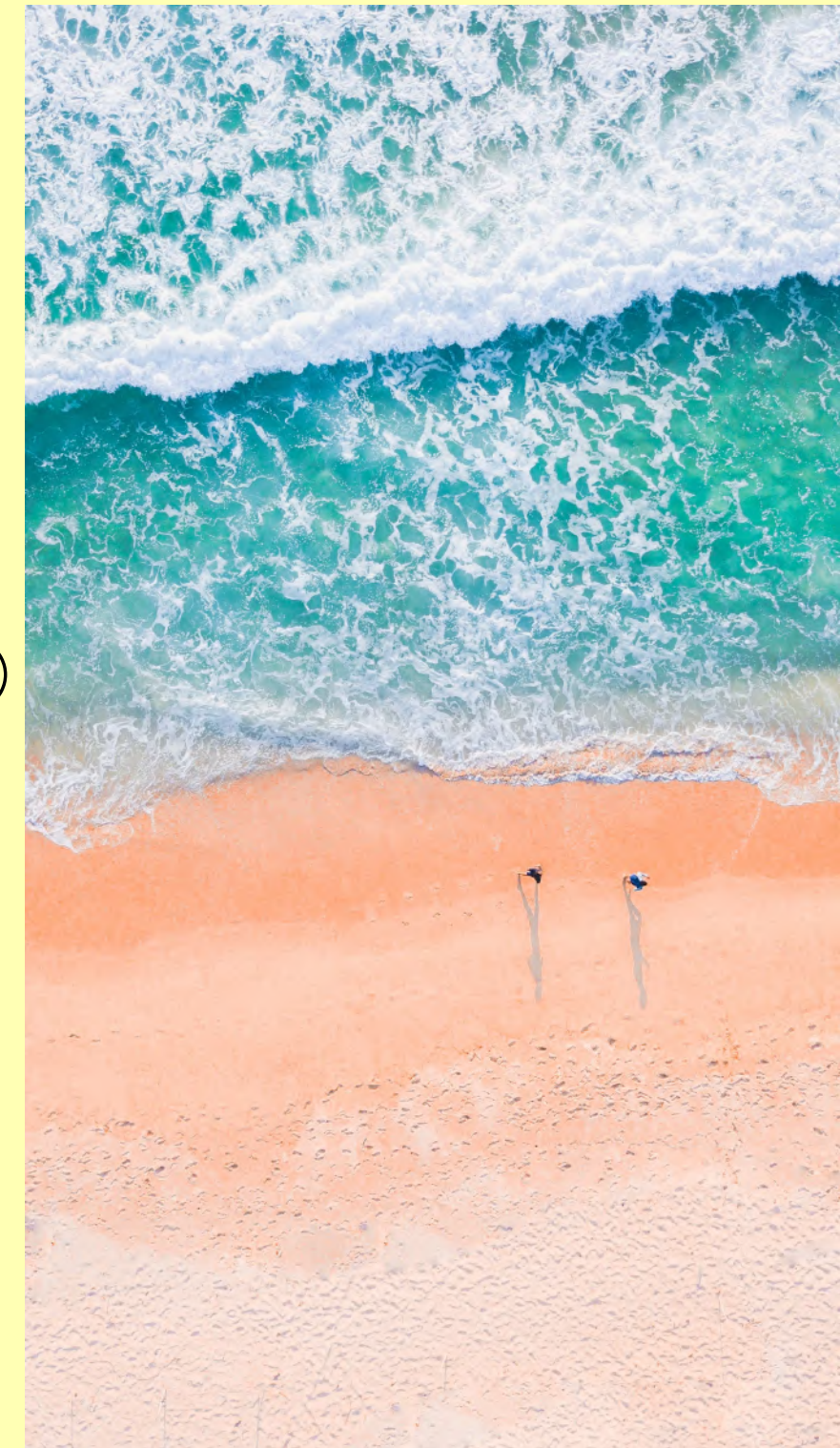
What would happen tomorrow without today yesterday called gone forever ago after awhile

(Whoa Woafers, woofers wowwoowwooffy?) Oh man, ain't really much use talk no further puttin stuff aside... (Sigh...)

[Refrain 0]

Ooh ooh ah iahhh, yuhuuuurrggghhhhghee hhoogheeeeeee eeeewerrr

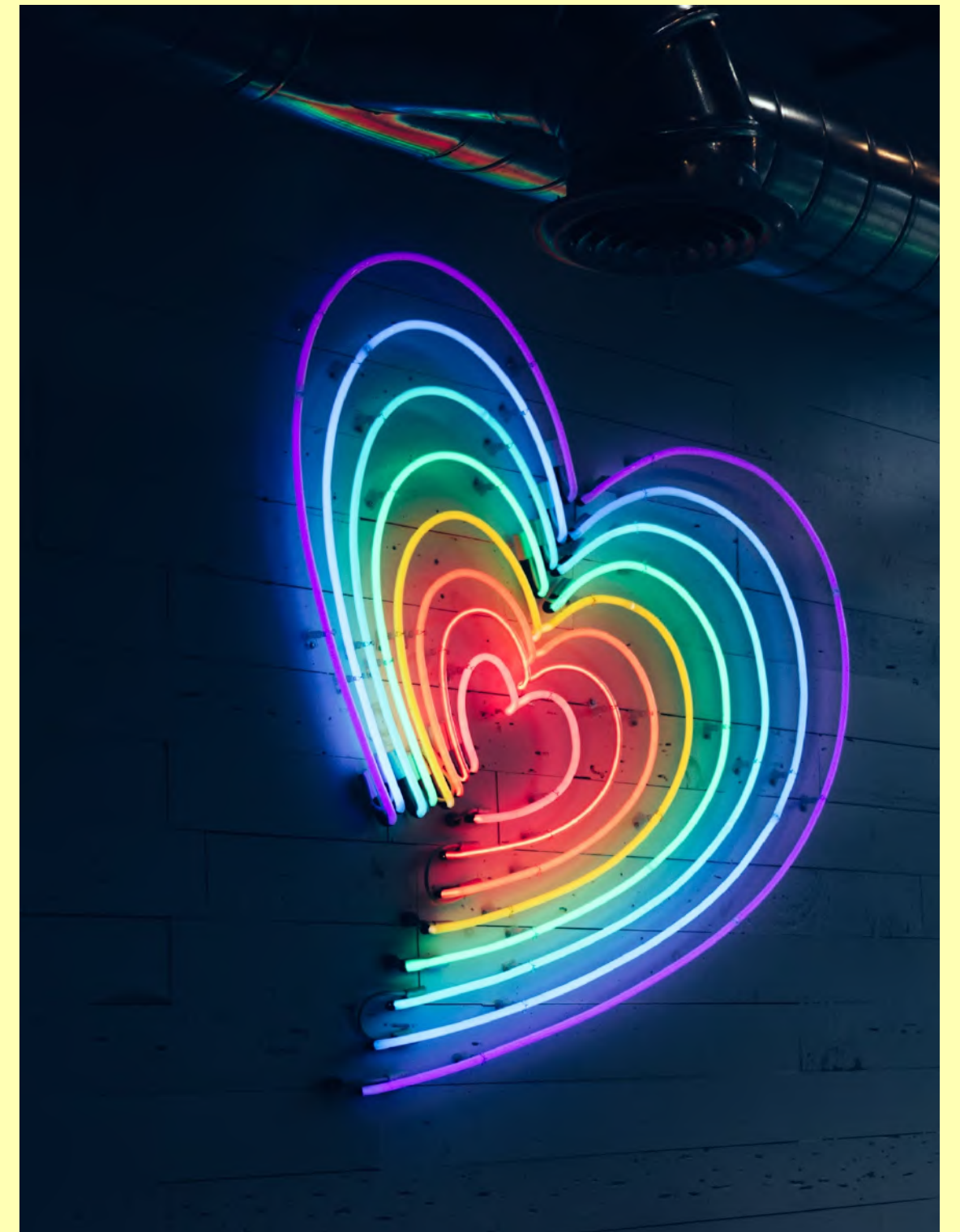
Hoe wouuf eh gaeen uppieyyee taaaaaaab dda bbbbbblllehhhhhtttttthhha n



PERFORMANCES AFTER TWO EPOCHS

PROMPT: *"Generate lyrics for an indie song about love"*

I'm so lost without you, I can't see through the dark sky of my soul /
But when we're together it's like looking at something new in your eyes every night/
'Cause our hearts are burning with passion as if they were on fire tonight (night) - oh-oh!
Tonight...you know? Oh yeah?! Hey heyheyyeahno noo ooo[(O)]NO NO!!! No'No" [4]
{ }?????? {5} {6}, ok now look up to me while i am falling down from above; yes just lean
back into him again because he will be there forever.
Yeah baby don't worry 'cause soon enough this world is gonna end but not before us
then what should have been done was never undone by any means...in fact all things may
come true one day or another that won't if anything could ever happen anymore nothing
matters right? Is life worth living though?? Nah nah still alive ainígónáh ahahahaha
ehheeeehhhiiiiihhhhhhh!! You'll find out later anyway maybe someday sometime
somewhere else some other time even after death itself lol hjjj jmm mmmmmmmm
mmhmmsmmyyyy



LYRICS COMPLETION

MODELS

1. PY007/TinyLlama-1.1B-step-50K-105b
2. mistralai/Mistral-7B-v.01



PERFORMANCES WITHOUT TRAINING

MISTRAL 7B

OUTPUT

Its like we were made for eachother
You know whats crazy? We both got the same
mother!
If it ain't about money then its nothin to me
And that goes double when Im talkin bout family
Cause baby girl your momma is my mama too
So don't ever try and come between us two
We are one unit, so dont even try to split em up
Im just tryna keep this thing together cause im
sick of havin to put 'em back together again

Try Pitch

INPUT

*Would you be with Jay-Z if he wasn't C-E-O
Would you be with F-A-B-O if he drove a Neo
Would you ride with Ne-Yo, if he was in a Geo
Well why the hell you think these bitches
comin' at me fo'
But since they all fall in my Palm, I take a trio, yo
Yesterday I was half the man you see
Baby thats because you the other half of me*

TINYLLAMA

OUTPUT

I know that it isnt fair to say goodbye but its time for change
So let us go on and make this world better than we are now
And then when our bodies start breaking down like crazy
We can still do whats right by ourselves
You gotta get out there and show them how much i love ya
If u don `t have any money or no one else will give up their life so
fuck off baby!
[music playing] < commit_msg > Update
2013/4/5.md < commit_after > < ?php
/**
*

PERFORMANCES 300 STEPS



INPUT

Aye, yo this mutherfucka's jammin', I'm on it it's an anthem
Who is that in the Phantom, please no cameras
They gone have me on Concrete Loop in my pajamas
To hide the goods, I would need pants big as Hammers
I be tippin' them dancers, they be sayin' I'm handsome
I was pretty before the dough but now I'm just the man
You remind me of my old chick

OUTPUT

She got her ass up and she ain't like a **bitch**
And you know how to do things with your poo
So we go back at our pooo
We get out of here
Yeah! **Yeezzy**!!!!
Happy New Year! Aaaaaaa-haze
Cause all yes are gonna be **hoppins**
Gonna make some shit
Man, what did he? Man, why am still
Like when first time around
Knowing where I come from
Beat down the **hassle**
Fine, let us fly

INPUT

If anybody got five dollars in your pocket right now
I call this club Titanic
Why, cause it's going down
For all my young ladies ladies that driving Miss Daisy
Driving me crazy, rock the beat, baby
Hop up out the ERR! she eat up the pavement
I don't give a ERR!, baby, he crazy

OUTPUT

And I ain't giving a FERR!' you know what?
You gon get 'em, girlfriend
Girlfuckin', bitch-brother
Baby, we goin' to hell
We need some help from **God** and a good woman like her brother
She just want somebody who can be with us
Cuz they love their sister but not them
They hate each other so bad at church
Father is pastor of church
Brotha are preachers
Preacher said: "If there was no Jesus"

PERFORMANCES 300 STEPS



INPUT

Would you be with Jay-Z if he wasn't C-E-O
Would you be with F-A-B-O if he drove a Neo
Would you ride with Ne-Yo, if he was in a Geo
Well why the hell you think these bitches comin' at me fo'
But since they all fall in my Palm, I take a trio, yo
Yesterday I was half the man you see
Baby thats because you the other half of me

OUTPUT

I know how to use your phone and app on
Same time as when we were together
And now that our lives are apart us from
We still need eachother out after
So what do we have? We got ourselves backs up
Fed by one another so would we had been
Now we just want for cash in case someone else needed help
Cause it ain
Ga ga Ga! Ain'n nga na nah
Nna not like NNA
Not even 10 years old but already gone
Had done everything before God

PERFORMANCES 1000 STEPS



INPUT

Would you be with Jay-Z if he wasn't C-E-O
Would you be with F-A-B-O if he drove a Neo
Would you ride with Ne-Yo, if he was in a Geo
Well why the hell you think these bitches comin' at me fo'
But since they all fall in my Palm, I take a trio, yo
Yesterday I was half the man you see
Baby thats because you the other half of me

OUTPUT

I have got get put like control over
Get as g*GL or G_G
And i still f**g it up *f} 2 (C) {10 } "Xi" Xi(P)) ^^yl I ^^xl x new Boss
New Man \$35ll\$\$\$%H<&> <+><= > %D + D & H for _New P.F.*
(*)_(*) Want to **(&) (Operations Explee)I Ew want * Wr WW
WW WW! Like WW *Like WW

Strange behaviour from the model



PERFORMANCES 300 STEPS



INPUT

Would you be with Jay-Z if he wasn't C-E-O
Would you be with F-A-B-O if he drove a Neo
Would you ride with Ne-Yo, if he was in a Geo
Well why the hell you think these bitches comin' at me fo'
But since they all fall in my Palm, I take a trio, yo
Yesterday I was half the man you see
Baby thats because you the other half of me

OUTPUT

And we just got through to our first day on earth
Now let's get this party started right now!
I know it ain't no how would but please don't stop that flow
We gon' make some more money than **Kanye** did last year
You can call 'em **haters** and **niggas** who hate us
Cause when them **hoes** leave your **ass** for another dude
They say "you too black" or "too white" so she gotta go?"
She said her friend told her about him then asked what happened?
Then she ask his girlfriend where she been lately

INPUT

Aye, yo this mutherfucka's jammin', I'm on it it's an anthem
Who is that in the Phantom, please no cameras
They gone have me on Concrete Loop in my pajamas
To hide the goods, I would need pants big as Hammers
I be tippin' them dancers, they be sayin' I'm handsome
I was pretty before the dough but now I'm just the man
You remind me of my old chick

OUTPUT

But you ain't never seen a **nigga** like him though
And if she ever get her own show then he gon' blow up too! (Yo!)
She got some good friends and we all go out to eat
We don't talk about money or what type of car we drive
What kind of cars do rappers ride? What kinda clothes should rapper
size?!
So let us know when your favorite artist drop his new album
Let us know where **yall** at so we can meet there with our laptops
Lets make sure everybody copped their tickets for the tour dates

PERFORMANCES 300 STEPS



INPUT

I'm tryna keep my faith
We on an ultralight beam
We on an ultralight beam
This is a God dream
This is a God dream

OUTPUT

this is the **real deal**
I know it's hard to believe in yourself sometimes
But you gotta have that belief within your heart and soul
And when things get rough just remember where we came from
You ain't never been here before? You don't even speak English! (Yo!)
What if they say no more? What then do ya tell me? Yay or **nigga** bye!"

INPUT

Sun is down, freezin' cold
That's how we already know, winter's here
My dawg would probably do it for a Louis belt
That's just all he know, he don't know nothin' else

OUTPUT

He got the best of me right now and I can feel him in my hands right about now
I might be **trippin'**, that was some other shit though
Maybe you could help us out
Cause when they said no to love again (No!)
Now everybody saying everything ain't fair anymore
But then there go these niggas on another spree
And at this rate **Yeezys** gonna cost an arm or leg before Bretty Graystone reclaim his glory!