Model(base):facebook/bart-base

scaler = GradScaler()

optimizer = AdamW(model.parameters(), lr=2e-5, weight\_decay=0.01)

scheduler = get\_linear\_schedule\_with\_warmup(optimizer, num\_warmup\_steps=50, num\_training\_steps=len(train\_dataloader) \* 10)

early\_stopping\_rounds = 2

best\_rouge\_score = -1

current\_round = 0

Runing 10 epoch

Entertainment evaluation

**Good Example with good score in ROUGE-1 Precision (0.98) :**

Article:

Parker's saxophone heads auction..A saxophone belonging to legendary jazz musician Charlie Parker is expected to fetch up to $1m (??535,000) at an auction of jazz memorabilia next month...The sale, at Guernsey's Auction House in New York, will feature instruments from other musicians including John Coltrane and Benny Goodman. Other items will include an evening gown belonging to Ella Fitzgerald. Organisers said the auction was the first in the US to be devoted to items belonging to jazz musicians...Other items that will be auctioned include unreleased tape recordings of music by Parker as well as handwritten sheet music by jazz composers John Coltrane and Theolonius Monk. Among the instruments in the sale will be a trumpet which belonged to Dizzy Gillespie, which is expected to fetch around $500,000 (??267,000), as well as JJ Johnson's trombone and a vibraphone which beloned to Lionel Hampton. Works of art by musicians including Miles Davis and Bruni Sablan will also be featured. The proceeds from the auction, which will take place on 20 February, will go towards several organisations including the John Coltrane Foundation, a foundation set up in memory of Benny Goodman, and the Red Cross.

Expected Summary:

The sale, at Guernsey's Auction House in New York, will feature instruments from other musicians including John Coltrane and Benny Goodman.A saxophone belonging to legendary jazz musician Charlie Parker is expected to fetch up to $1m (??535,000) at an auction of jazz memorabilia next month.Organisers said the auction was the first in the US to be devoted to items belonging to jazz musicians.Other items that will be auctioned include unreleased tape recordings of music by Parker as well as handwritten sheet music by jazz composers John Coltrane and Theolonius Monk.

My fine-tuned model:

summarize: Parker's saxophone heads auction..A saxophone belonging to legendary jazz musician Charlie Parker is expected to fetch up to $1m (??535,000) at an auction of jazz memorabilia next month...The sale, at Guernsey's Auction House in New York, will feature instruments from other musicians including John Coltrane and Benny Goodman. Other items will include an evening gown belonging to Ella Fitzgerald. Organisers said the auction was the first in the US to be devoted to items belonging to jazz musicians...Other items that will be auctioned include unreleased tape recordings of music by Parker as well as handwritten sheet music by jazz composers John ColTrane and Thelonius Monk. Among the instruments

**Normal score(0.5):**

Ariticle: US TV special for tsunami relief..A US television network will screen a celebrity TV special to benefit the tsunami relief effort in South Asia...NBC will encourage viewer donations during an hour-long show featuring musical performances on 15 January. Actress Sandra Bullock has donated $1m (??525,000) to The American Red Cross and actor Leonardo DiCaprio pledged a "sizable" aid contribution to Unicef. Meanwhile 70 Hong Kong music and movie stars re-recorded We Are the World in Mandarin and Cantonese to raise funds...The song will not be released as a single, but will be played regularly during a Chinese telethon on Friday in aid of victims of the Boxing Day disaster. Around 140,000 people were killed and five million left homeless or without food and water after an earthquake below the Indian Ocean sent waves crashing into coastal communities in 11 countries...The United Nations warned that the number killed in the disaster could rise sharply, with aid yet to reach some remote areas. Performers have yet to be confirmed for NBC's aid relief benefit later this month. It follows a two-hour telethon carried by all four major US television networks 10 days after the 11 September terror attacks in 2001. America: A Tribute to Heroes raised more than $150m (??79m) to help victims of the suicide attacks on the World Trade Center and Pentagon.

Expected Summary:

The song will not be released as a single, but will be played regularly during a Chinese telethon on Friday in aid of victims of the Boxing Day disaster.Performers have yet to be confirmed for NBC's aid relief benefit later this month.The United Nations warned that the number killed in the disaster could rise sharply, with aid yet to reach some remote areas.It follows a two-hour telethon carried by all four major US television networks 10 days after the 11 September terror attacks in 2001.

Predicted Summary:

summarize: US TV special for tsunami relief..A US television network will screen a celebrity TV special to benefit the tsunami relief effort in South Asia...NBC will encourage viewer donations during an hour-long show featuring musical performances on 15 January. Actress Sandra Bullock has donated $1m (??525,000) to The American Red Cross and actor Leonardo DiCaprio pledged a "sizable" aid contribution to Unicef. Meanwhile 70 Hong Kong to raise funds...The song will not be released as a single, but will be played regularly during a Chinese telethon on Friday in aid of victims of the Boxing Day disaster. Around 140,000 people were killed and five million left homeless or without food and water after an

**Bad one(0.14):**

Article: Nominations for the 89th Academy Awards will be announced on Tuesday, and movie marketers will be ready to pounce with ads that try to coax more people into seats: The establishment is swooning! Get to a theater! It works. Research indicates that Oscar nominations often result in tens of millions in additional ticket sales, particularly for films. Among the movies counting on awards attention to find a bigger audience is ??Moonlight. ?? Seen as a leading contender for best picture, this euphorically reviewed drama about a young black man in Miami started strong but has stalled. It has taken in about $15. 8 million over 14 weeks. For ??Silence,?? Martin Scorsese and Paramount desperately need the academy to help their drama from becoming a financial washout. Costing $50 million to make, ??Silence,?? a passion project for Mr. Scorsese as director, has collected $5. 2 million since its arrival on Dec. 23. ??Lion,?? a set largely in India, is a Weinstein Company film that has earned $16. 4 million ?? a solid result for an art film of its type but still a long way from Weinstein awards hits in recent years. (Another Weinstein movie, ??The Founder,?? about the start of the McDonald??s empire, arrived to $3. 4 million in ticket sales over the weekend.) ??20th Century Women,?? a comedic drama about a quirky mother (Annette Bening) in the late 1970s, has taken in $2. 3 million. An Oscar nomination for Ms. Bening would help give it momentum. As for the weekend, ??Split,?? the latest thriller from M. Night Shyamalan and Blumhouse Productions, was the No. 1 movie in North America. Expertly marketed by Universal Pictures, which leaned on digital promotions, ??Split?? sold an estimated $40. 2 million in tickets, far surpassing prerelease analyst expectations. ??Split?? cost just $9 million to make, with Mr. Shyamalan personally footing the bill. Arriving as a distant second was ??XXX: The Return of Xander Cage?? (Paramount) which managed roughly $20 million ?? an underwhelming start for a film that cost at least $125 million to make and market and was designed

Expected Summary:

"In his latest moves to dismantle the legacy of his predecessor, Mr. Trump resurrected the Keystone XL pipeline that had stirred years of debate, and expedited another pipeline in the Dakotas that had become a major flash point for Native Americans.

The Army sidetracked the Dakota Access pipeline in North Dakota last month in the waning days of the Obama administration.

Mr. Trump met on Tuesday with executives of major American automakers, who complained that before leaving office, Mr. Obama finalized an ambitious E. P. A. rule requiring that vehicles average 54. 5 miles per gallon by 2026. Mr. Trump said he would help with burdensome regulations, but offered no specifics.

In the meantime, the Keystone and Dakota pipelines provided Mr. Trump with visible ways to demonstrate action.

?? In addition to the Keystone and Dakota directives, Mr. Trump signed three others intended to ease the way for businesses and to promote American manufacturing. One instructed the Commerce Department to develop a plan to ensure that future pipelines built in the United States be constructed of materials."

Predicted Summary:

summarize: Nominations for the 89th Academy Awards will be announced on Tuesday, and movie marketers will be ready to pounce with ads that try to coax more people into seats: The establishment is swooning! Get to a theater! It works. Research indicates that Oscar nominations often result in tens of millions in additional ticket sales, particularly for ?? films. Among the movies counting on awards attention to find a bigger audience is ??Moonlight. ?? Seen as a leading contender for best picture, this euphorically reviewed drama about a young black man in Miami started strong but has stalled. It has taken in about $15. 8 million over 14 weeks. For ??Silence,???

Improvement:

Need to remove punctuations or emoji in the training dataset(might improve more)

need increase the batch size for long summarization

Might increase the max length to 1024 for the input articles