

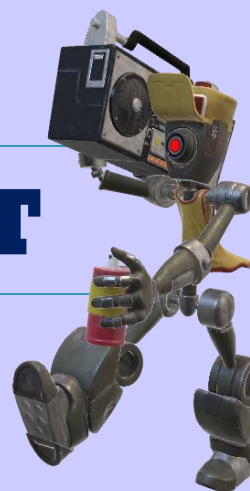


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# MMT ASSIGNMENT

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NO.:1.1



COURSE CODE:CO19301

SS20CO008 (SECOND SHIFT)

MANJIRI CHAVANDE



# OPEN SOURCE



# MULTIMEDIA PROCESSING SOFTWARE

- A SOFTWARE WHOSE SOURCE CODE IS FREELY DISTRIBUTED WITH A LICENSE TO STUDY, CHANGE AND FURTHER DISTRIBUTED TO ANYONE FOR ANY PURPOSE IS CALLED **OPEN SOURCE SOFTWARE.**



## OPEN SOURCE IMAGE PROCESSING SOFTWARE



## GIMP

The GNU image manipulation program (GIMP) is a well known alternative for photoshop and feature rich free program.it also sets a standard for cutting-edge, photo-editing and many other features. This software is

also supported by a huge online community. It can be installed by **windows installer**.



## SOME OTHER IMAGE PROCESSING SOFTWARE ARE:



**KRITA** [digital painting]



**PINTA** [bitmap image drawing and editing]



**DARKTABLE** [raster graphics editor]



**INKSCAPE** [vector graphics]



**SCRIBUS** [desktop publishing]

Krita	Windows , Linux, macOS
Pinta	Windows , Linux, macOS
Darktable	Linux or MacOS

inkscape	Windows , Linux, macOS
scribus	Linux, FreeBSD, PC-BSD, NetBSD, OpenBSD, Solaris, Open Indiana, Debian GNU/Hurd, Mac OS X, OS/2 Warp 4, eComStation, Haiku and Windows

## **OPEN SOURCE AUDIO PROCESSING SOFTWARE**



### **AUDACITY**

Audacity is an easy-to-use multi-track audio editor and recorder for **Windows , GNU/Linux, macOS** and other operating systems.



### **SOME OTHER AUDIO PROCESSING OPEN SOFTWARES**

🔊 **TRAVERSO DAW** [multi-track audio recorder and editor]

🔊 **ARDOUR** (digital audio recording)

🔊 **MIXX** [DJ, music mixing]

🔊 **QTRACTOR** [digital audio workstation]

TRAVERSO DAW	Microsoft windows
ARDOUR	Linux, macOS, FreeBSD and Microsoft Windows
MIXX	Windows, macOS, and Linux
QTRACTOR	Linux, macOS, Android and Microsoft Windows



## OPEN SOURCE VIDEO PROCESSING SOFTWARES

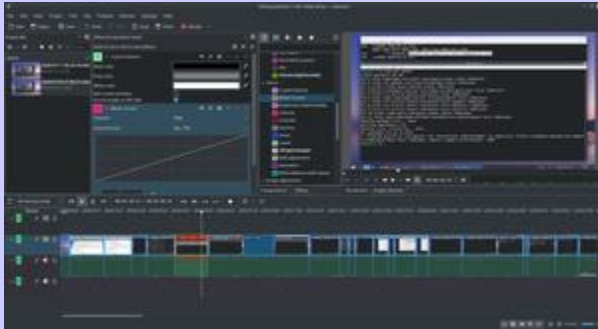


**KDENLIVE**



It is a multi-track video editor, all kinds of audio/video format are supported with the help of FFmpeg libraries. It also consists of a 2D title maker and has a customizable interface.





and shortcuts. The proxy editing makes things faster and this software has many such features. It is available on platforms like Linux, macOS and Windows.





## SOME OTHER VIDEO PROCESSING SOFTWARE

-  BLENDER
-  SHOTCUT
-  PITVI
-  VLC

BLENDER	 Linux, FreeBSD, PC-BSD, NetBSD, OpenBSD, Debian GNU/Hurd, Mac OS X, OS/2 Warp 4, eComStation, Haiku and Windows
SHOTCUT	 Windows , Linux, macOS, Free BSD
PITVI	 Linux
VLC	 Android, iOS, iPadOS, Tizen, Windows 10 Mobile, and Windows Phone



## SOME MORE OPEN SOURCE SOFTWARES



🖥️ OBS (live editing, recording, and streaming)

🖥️ BLENDER VELVETS (video editing, compositing, effects)

🖥️ OPEN SHOT (VIDEO AND AUDIO PROCESSING)





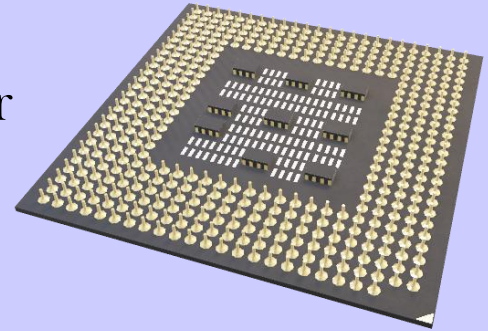
## **HARDWARE REQUIREMENTS FOR OPEN SOURCE SOFTWARES**

RAM: Minimum 2GB

PROCESSOR: Core2duo or higher

DISK SPACE: 10GB or higher

OS: Windows, Linux, MacOS



## **SOFTWARE REQUIREMENTS FOR OPEN SOURCE SOFTWARE**

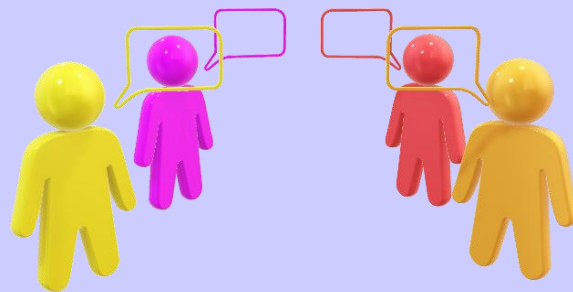
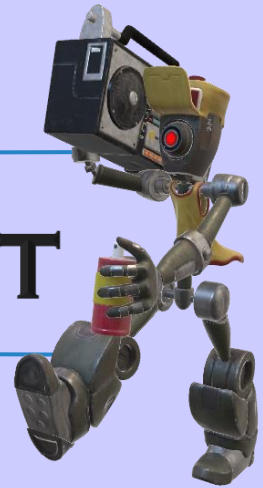
- 🔍 The standard must not withhold any detail necessary for interoperable implementation.
- 🔍 The standard must be freely and publicly available under royalty-free terms at reasonable and non-discriminatory cost.
- 🔍 There must not be any requirement for execution of a license agreement, NDA, grantclick-through or any other form of paperwork to deploy conforming implementations of the standard.



**THE REPORT CONTAINS ANALYSIS OF DIFFERENT TYPES OF OPEN SOURCE MULTIMEDIA PROCESSING SOFTWARE BASED ON THEIR CATEGORY AND USES. IT GIVES US A VIVID DESCRIPTION ABOUT THEIR HARDWARE AND SOFTWARE REQUIREMENTS.**

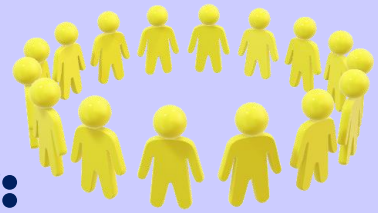


# MMT ASSIGNMENT





## **DIFFERENT LICENSES AVAILABLE FOR CONTENT:**



### **CREATIVE COMMONS:**



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COMMONS:



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ALIKE CC BY-NC-SA**



**ATTRIBUTION NON COMMERCIAL-NO  
DERIVES CCBY-NC-ND**



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**PUBLIC DOMAIN:** It consists of al the creative work to which no exclusive property rights appl. Those rights may have expired, been forfeited, expressly waived, or may be inapplicable. The concept public domain may also be interchangeably sed with other imprecise or undefined terms such as the public sphere or commons including concepts such as commons of the mind .



## **WEBSITE/ AUDIO/ VIDEO AND THEIR LICENSES:**

	<b>LICENSE TYPE</b>
<b>WIKIPEDIA</b>	CREATIVE COMMONS ATTRIBUTION SHARE ALIKE LICENSE

<b>VISHWAMOHINI</b> (audio website)	COPYRIGHTED
<b>SPOKEN TUTORIAL</b>	CREATIVE COMMANS ATTRIBUTION SHARE ALIKE
<b>TUTORIALS POINT</b>	COPYRIGHTED
<b>PIXABAY</b>	CREATIVE COMMONS
<b>ORACLE</b>	COPYRIGHT
<b>AUDIONAUTIX</b>	CREATIVE COMMONS
<b>EBAY</b>	COPYRIGHT
<b>FREE STOCK PHOTOS</b>	PUBLIC DOMAIN
<b>STACK OVERFLOW</b>	COPYRIGHT





गणराज गजानन रे, सिंधु आनंदाचा





**SOFTWARE USED :GIMP**

SS20CO008

MMT ASSIGNMENT





- **THIS IS THE ORIGINAL IMAGE IMPORTED IN THE COMPUTER**

#### Image

Image ID

Dimensions 1080 x 495

Width 1080 pixels

Height 495 pixels

Horizontal resolution 96 dpi

Vertical resolution 96 dpi

Bit depth 24

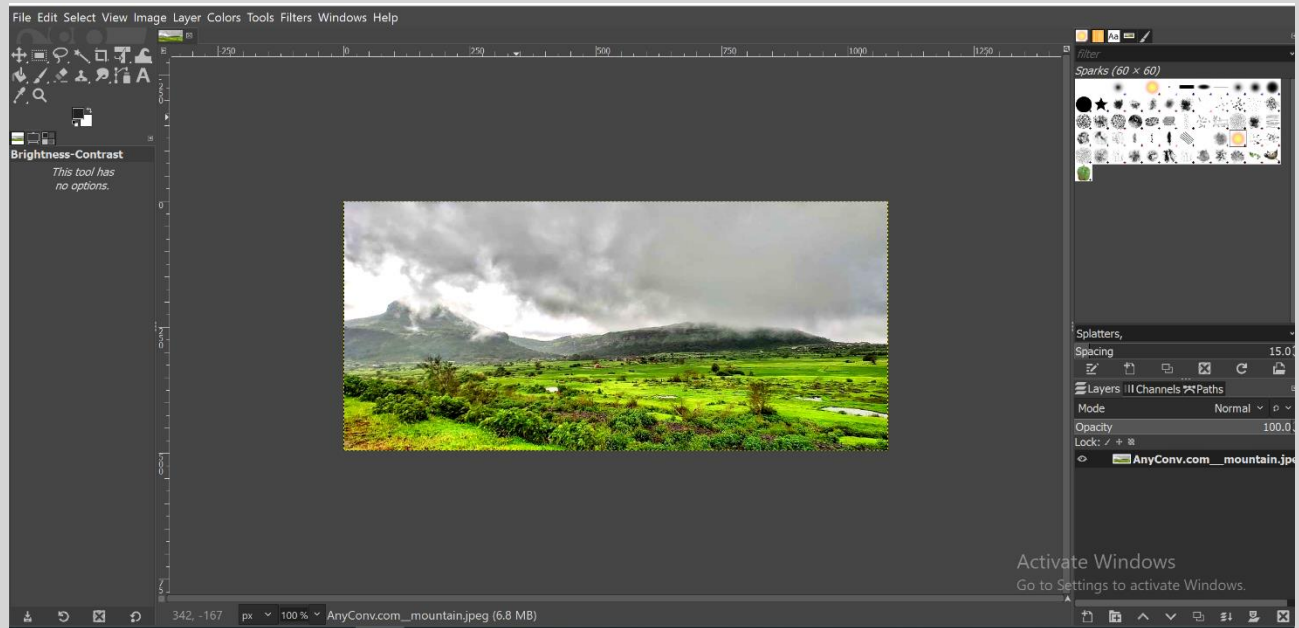
Compression

Resolution unit

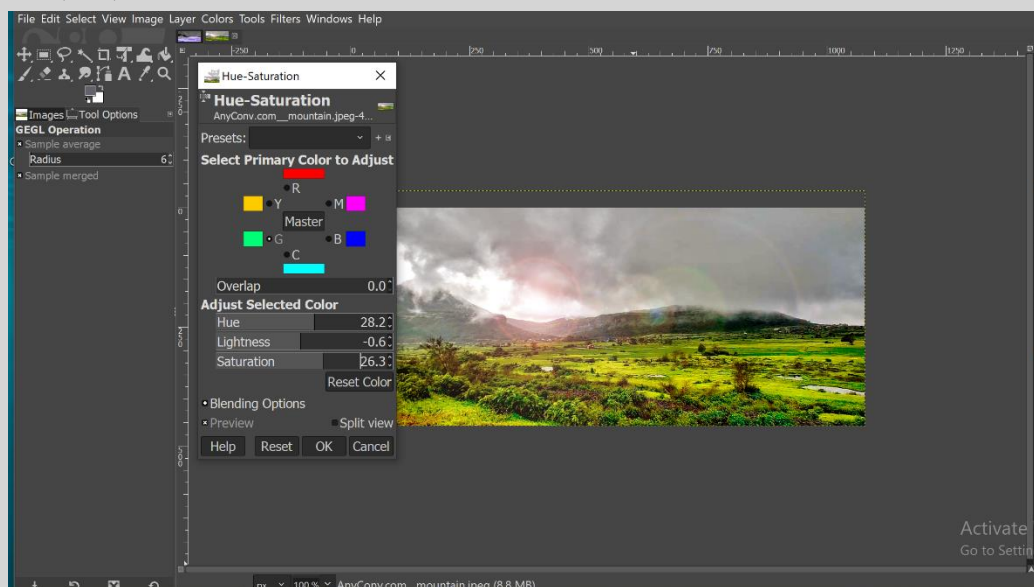
Color representation

Compressed bits/pixel

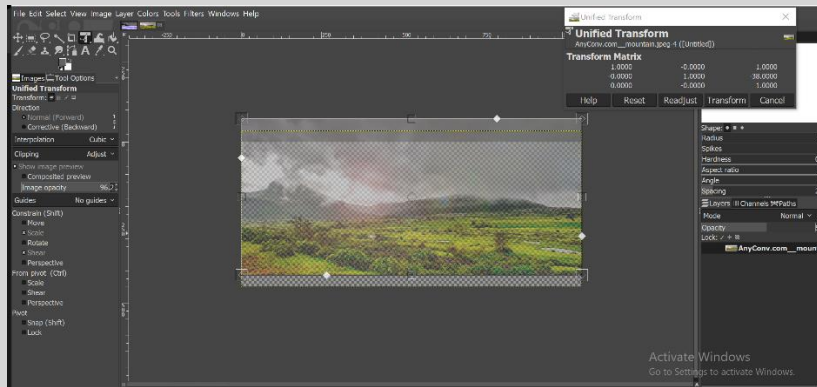
## ■ IMAGE AFTER CHANGING THE BRIGHTNESS AND CONTRAST



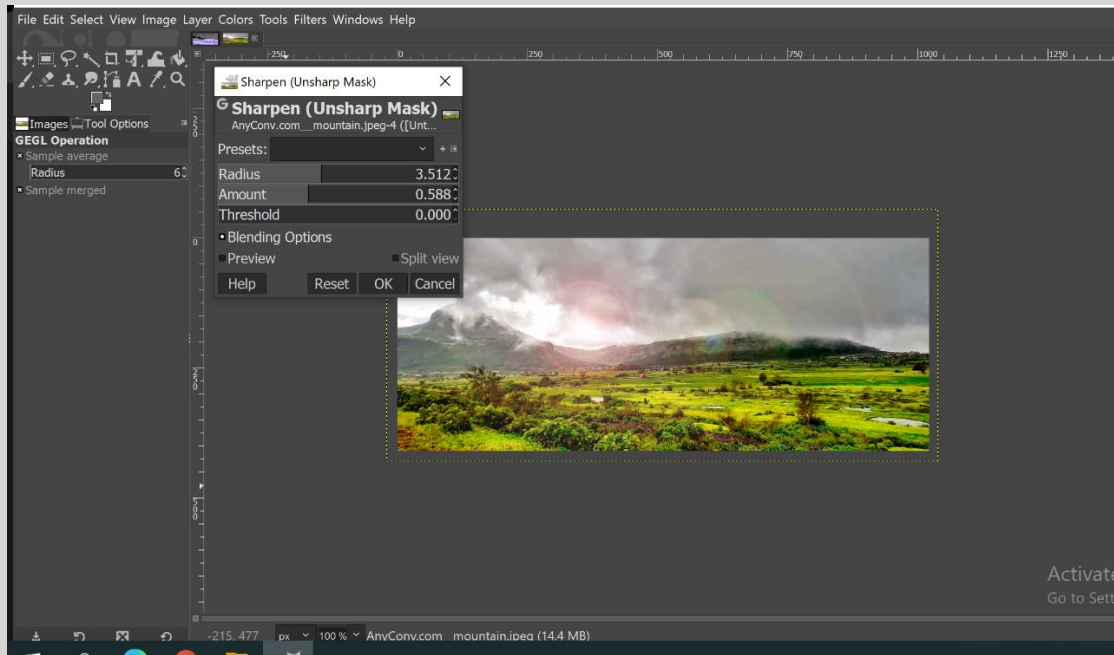
## ■ IMAGE AFTER ADDING HEU SATURATION AND SOME FILTERS



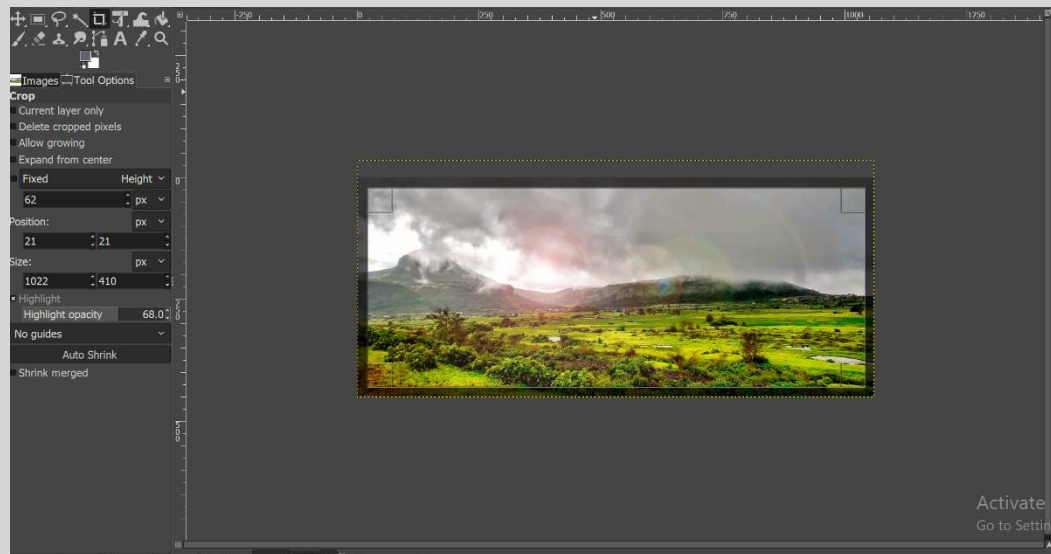
## ■ RESIZING THE IMAGE



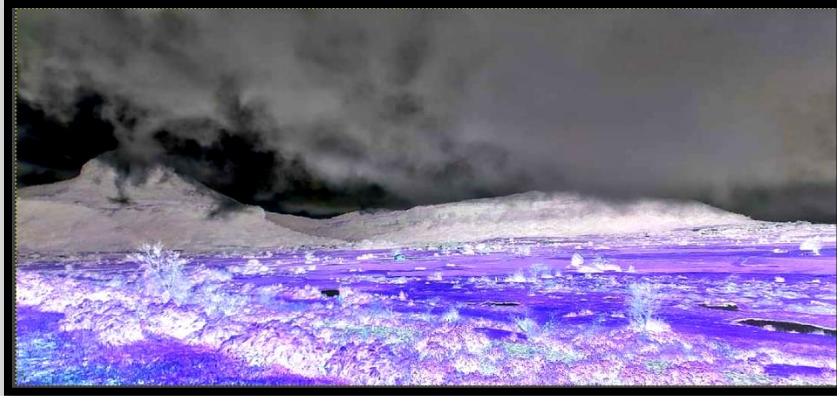
## ■ IMAGE AFTER CHANGING THE SHARPNESS



## ■ CROPPING THE EDGES OF THE IMAGE



## ■ NEGATIVE OF THE IMAGE







## ▪ FINAL OUTPUT

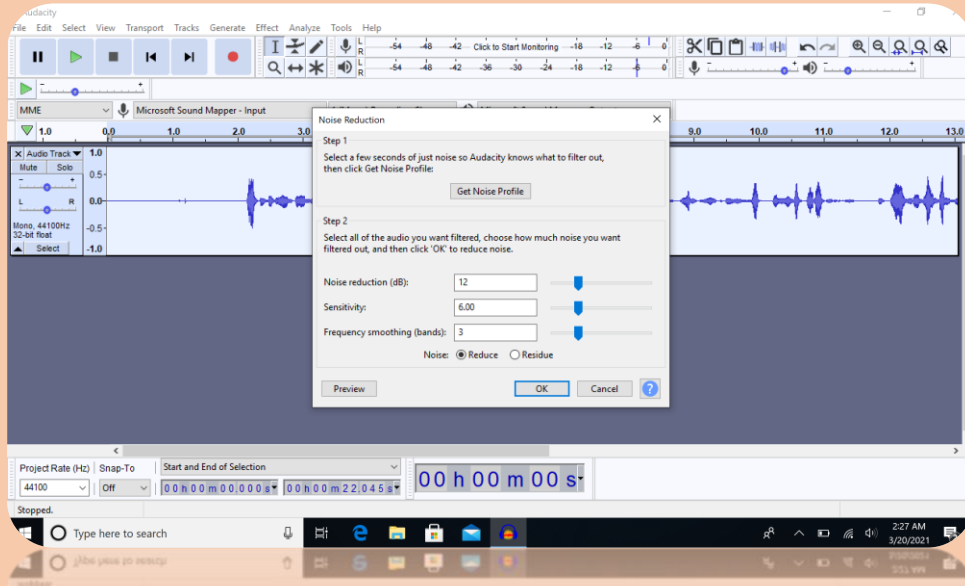


<b>SIZE IN PIXELS</b>	1022 X410 pixels
<b>RESOLUTIONS</b>	300 X300 ppi
<b>NUMBER OF PIXELS</b>	419020

# **AUDIO EDITING**

## **USING AUDACITY**

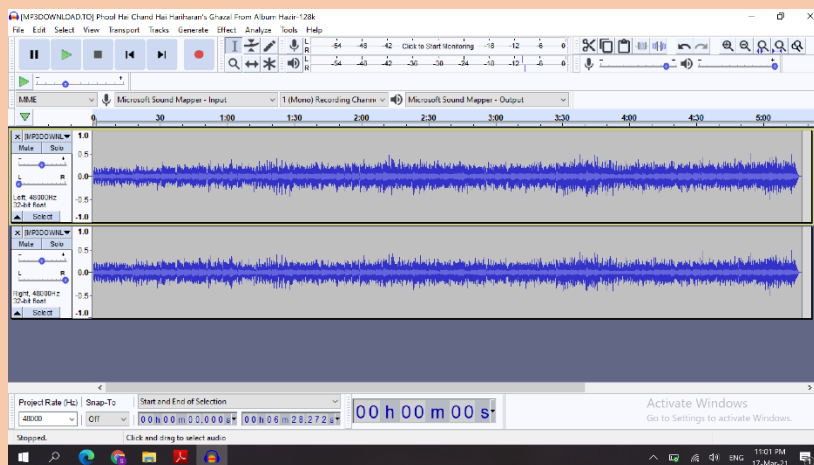


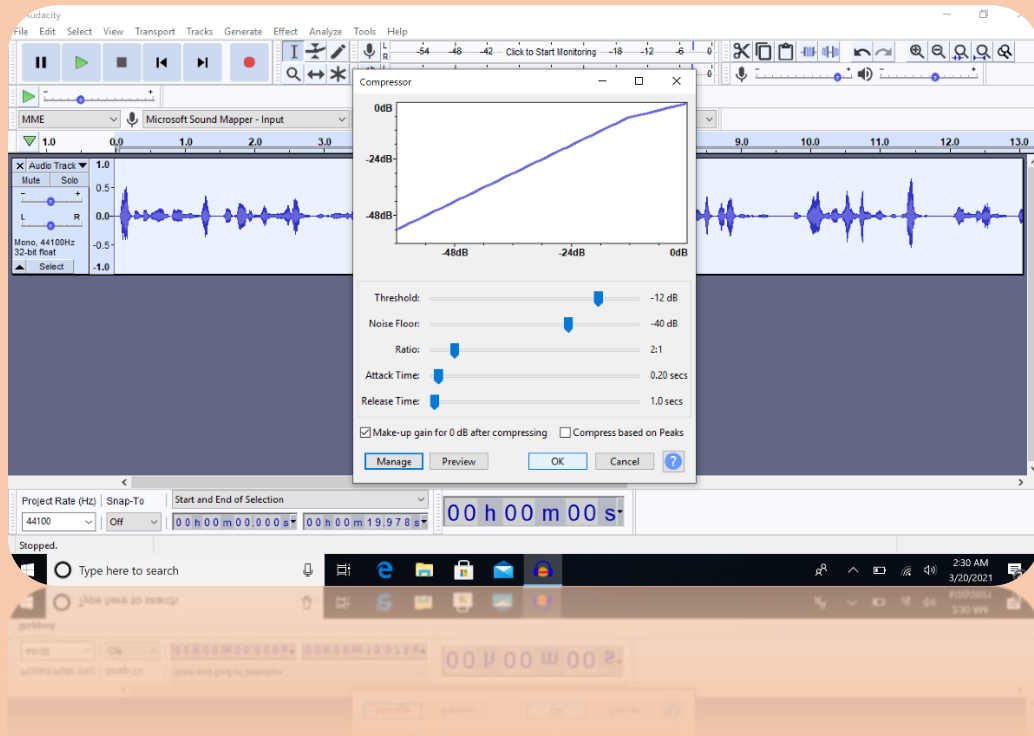


## # NOISE REDUCTION PROCESS IS PERFORMED FOR REMOVING THE UNNECESSARY BACKGROUND NOISE .

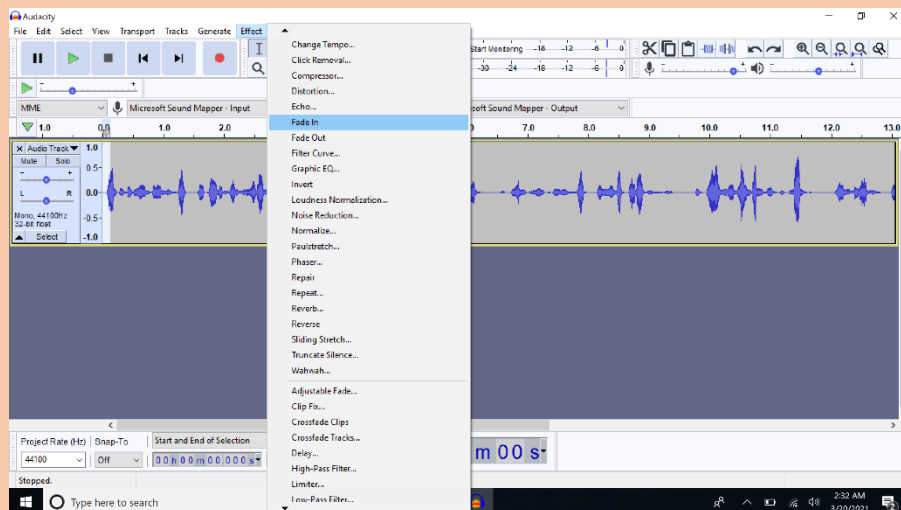
WE CAN PERFORM THE PROCESS AS MANY TIMES AS REQUIRED UNTIL YOU ARE SATISFIED WITH THE FINAL OUTPUT.

## # SPLITTING IN THE TRACK



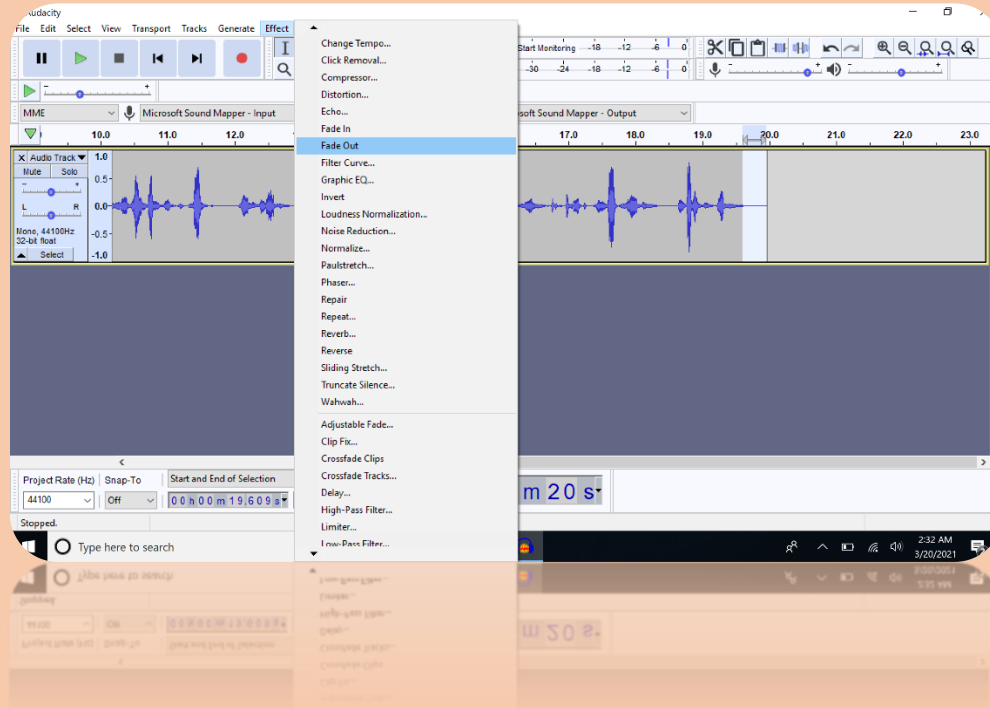


**# AFTER REMOVING THE BACKGROUND NOISE ITS TIME TO COMPRESS IT A BIT,AND CUTTING SOME PARTS FROM THE AUDIO.**



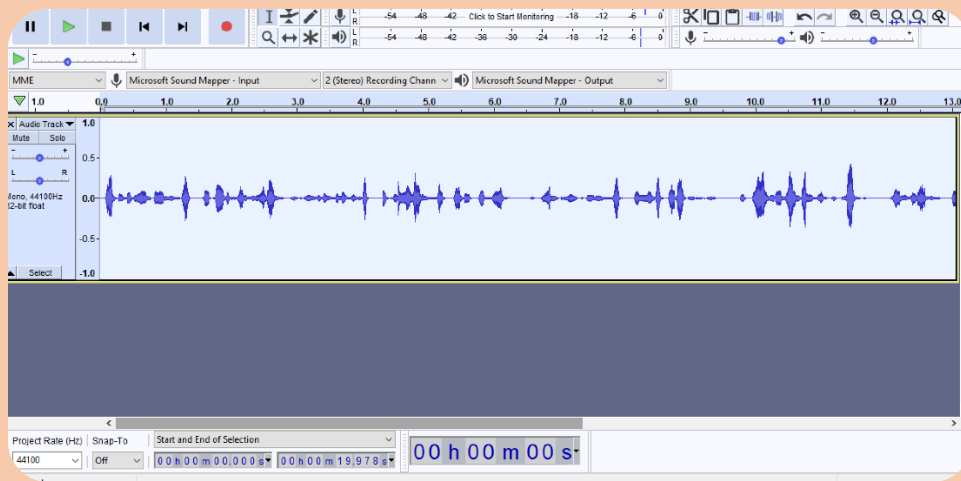
BY SS20CO008 MANJIRI CHAVANDE

## # ADDING A FADE IN EFFECT.

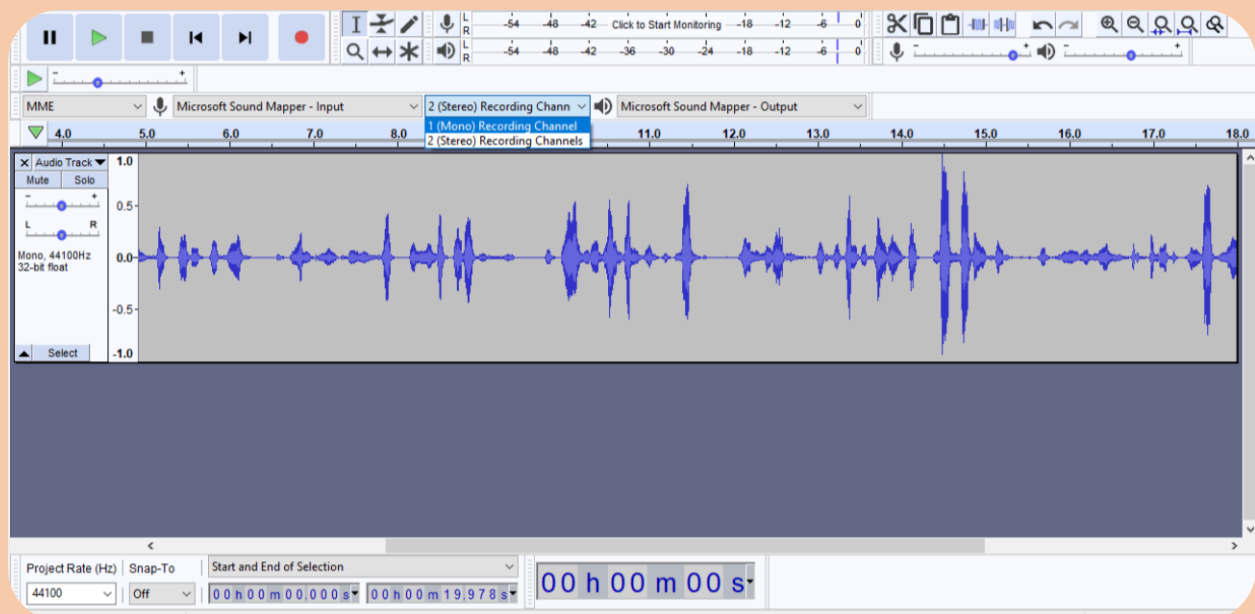


## # ADDING A FADE OUT EFFECT AN THE END

## #THIS IS THE IMAGE AFER INVERTING THE AUDIO



## # CONVERTING THE AUDIO FROM MONO TO STEREO CHANNEL





NEW AUDIO.mp3 (Command Line)

## **THIS IS THE FINAL OUTPUT**

**REPORT: All the steps performed in the above experiment gives us a vivid view about how authentic audio editing can be done by clipping, converting mono to stereo, adding fade in and fade out effect, Changing the speed, compressing and many other effects. We can either import an audio or record one and also export it in mp3 ,wav and many other formats.**