CASE STUDY : TO CONSIDER TWO BLACK AND WHITE IMAGES AND CONVERT TO COLOUR IMAGES USING TOOLS PROVIDED IN GIMP SOFTWARE.
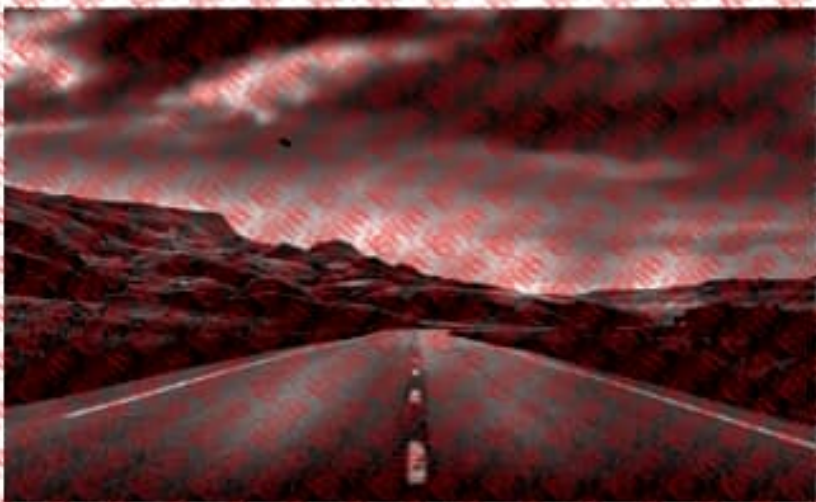
PROCEDURE :

1. Open the black and white picture in Gimp software.
2. By default, the black and white picture opens in Grayscale image mode. So, the image mode was changed to RGB from menu Image → Mode → RGB.
3. By going to Windows → Dockable Dialogs → Pallets, the pallets tab was enabled.
4. From the pallets tab, a new pallet was created to determine the selective shades for a colour that represents and closely resembles any of the object in the black and white image. This was done for multiple colours that fit rightly for that image.
5. Multiple copy of the base b/w image were created using the duplicate layer option present in the menu Layer → Duplicate Layer.
6. For an uniform colour containing area of the image (for example, sky having sky-blue colour), the brush tool was selected and the colour was set to the required colour (In this case, sky-blue).
7. For an area having different shades of the same colour, the colour pallet for that colour (as made in step 5) was selected and the following step was followed.
8. Selecting on one of the duplicate layers created, the image was colourised by going to the menu

option Colors → Map → Gradient Map (for step 6) or Colors → Map → Palette Map (for step 7).

9. For the same selected duplicate layer, the layer mask was created by going to Layer → Mask → Add Layer Mask and initialising layer mask to Black (full transparency). A new black box (or mask) gets created adjacent to the original layer.

10. With the mask layer box for the selected duplicate layer selected, the paintbrush tool was selected and the colour was set to white (meaning, reveal).

11. The paintbrush settings were adjusted as required. The basic settings to adjust were size, and hardness.

12. The layer mode was changed to any of the colourise modes, for example HSL colour or LCh colour from the mode option on the layers docked dialog.

13. Finally, the image was painted with white paintbrush setting on the layer mask to reveal the colour. This was done carefully to provide colour to only the necessary areas. For border of the areas, the size of the brush was reduced to paint about the border. In case of some error like painting on the wrong area, the colour was exchanged to black (foreground colour) and painted over the mistake-led areas to hide the colour.

14. With a different duplicate layer selected, the same steps from 6-13 were repeated with different colour selections for different areas of the image until the entire grayscale image was coloured.

15. For the final touches, the exposure, shadows-highlights, brightness-contrast were adjusted from the colours menu.

Original B/W Images

Gimp Colourised

Images