Beginning of main function

    Reset and initialize UART

    Allocate memory for the WAV input data

    Receive WAV input data via UART

    Allocate memory for the PCM audio data

    Allocate memory for the encoded MP2 audio data

    Initialize TwoLAME

    Check the WAV input data

    Allocate memory for the MP2 output data

    Beginning of loop

        Read audio data samples from WAV input data

        If there is any sample to read:

            Run TwoLAME

            Write MP2 output data

        If not:

            Exit from loop

    End of loop

    Run TwoLAME

    Write MP2 output data

    Shut down TwoLAME

    Send MP2 output data via UART

    Shut down UART

End of main function