Internet (commonly called as Net) is a global network of billions of interconnected systems and other electronic devices. Internet makes it possible to transfer any form of data and facilitates data communication. This is done simply by connecting computer to the Internet. As Internet is public the data being transferred is vulnerable to a lot of data theft attacks such as packet sniffing, packet spoofing etc., it is essential to protect the private data from such kind of attacks. When the network is not secure hackers can exploit the connection, giving them access to sensitive information and can possibly tamper the data.

In today’s world data is very crucial for businesses and individuals, hence it must be protected from all kinds of violations. Data must be secured from unauthorized access and manipulation. It is challenging to physically secure the network so data encryption can provide significant amount of security. Encryption is a technique through which the data is transformed in some incomprehensible form which cannot be interpreted by any attacker. After successful transmission of data, the receiver can restore the data received into its original form by applying appropriate decryption technique.

In this paper, we have presented a symmetric data encryption algorithm developed in Python to encrypt images, making the transmission secure