

```
from cryptography.fernet import Fernet
```

```
def generate_key():
```

```
    """
```

```
    Generate a key and save it to a file
```

```
    """
```

```
    key = Fernet.generate_key()
```

```
    with open("encryption_key.key", "wb") as key_file:
```

```
        key_file.write(key)
```

```
def load_key():
```

```
    """
```

```
    Load the previously generated key
```

```
    """
```

```
    return open("encryption_key.key", "rb").read()
```

```
def encrypt_message(message, key):
```

```
    """
```

```
    Encrypt the message using the provided key
```

```
    """
```

```
    f = Fernet(key)
```

```
    encrypted_message = f.encrypt(message.encode())
```

```
    return encrypted_message
```

```
def decrypt_message(encrypted_message, key):
```

```
    """
```

Decrypt the encrypted message using the provided key

```
"""
```

```
f = Fernet(key)
```

```
decrypted_message = f.decrypt(encrypted_message).decode()
```

```
return decrypted_message
```

```
# Generate and save the key
```

```
generate_key()
```

```
key = load_key()
```

```
# Example usage
```

```
message = "This is a secret message"
```

```
encrypted_message = encrypt_message(message, key)
```

```
print("Encrypted message:", encrypted_message)
```

```
decrypted_message = decrypt_message(encrypted_message, key)
```

```
print("Decrypted message:", decrypted_message)
```