Unit Testing Report

1. When you have loans due to the bank and then you go and ask for another loan, i.e your Credit History = 0 and you have moderate income then more likely your loan loan will not be approved and our model also shows the same.

2. When your Income is good and you have no pending loans then more likely your loan will be approved and out model also shows the same.

```
In [106]: i1 = int(input("Applicant Income = "))

          Applicant Income = 4200

In [107]: i2 = int(input("Co-Applicant Income = "))

          Co-Applicant Income = 1000

In [108]: i3 = int(input("Loan Amount = "))

          Loan Amount = 250

In [110]: i4 = int(input("Loan Term = "))

          Loan Term = 360

In [111]: i5 = int(input("Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = "))

          Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = 1

In [112]: i6 = int(input("Married (Enter 1 if 'Yes', 0 if 'No')  = "))

          Married (Enter 1 if 'Yes', 0 if 'No')  = 1

In [113]: i7 = int(input("Gender (Enter 1 if 'Male', 0 if 'Female') = "))

          Gender (Enter 1 if 'Male', 0 if 'Female') = 1
```

```
In [114]: i8 = int(input("Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or

          Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or more Dependen
          ts) = 1

In [115]: i9 = int(input("Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')"))

          Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')0

In [116]: i10 = int(input("Education (Enter 1 if 'Graduate', 0 otherwise) = "))

          Education (Enter 1 if 'Graduate', 0 otherwise) = 0

In [117]: i11 = int(input("Credit History (Enter 1 if no pending loans, 0 otherwise) = "))

          Credit History (Enter 1 if no pending loans, 0 otherwise) = 1
```

```
In [119]: result = grid.predict(df_test)
          if result[0]==1:
              display(Image(url= "Yes.jpg", width=400, height=400))
          else:
              display(Image(url= "No.jfif", width=400, height=400))
```

3. When your Income is low , although you have no pending loans then too more likely your loan will not be approved and our model also shows the same.

```
In [134]: i1 = int(input("Applicant Income = "))

          Applicant Income = 1400

In [135]: i2 = int(input("Co-Applicant Income = "))

          Co-Applicant Income = 0

In [136]: i3 = int(input("Loan Amount = "))

          Loan Amount = 120

In [137]: i4 = int(input("Loan Term = "))

          Loan Term = 360

In [138]: i5 = int(input("Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = "))

          Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = 1

In [139]: i6 = int(input("Married (Enter 1 if 'Yes', 0 if 'No')  = "))

          Married (Enter 1 if 'Yes', 0 if 'No')  = 1

In [140]: i7 = int(input("Gender (Enter 1 if 'Male', 0 if 'Female') = "))

          Gender (Enter 1 if 'Male', 0 if 'Female') = 1
```

```
In [141]: i8 = int(input("Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or

          Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or more Dependen
          ts) = 0

In [142]: i9 = int(input("Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')"))

          Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')1

In [143]: i10 = int(input("Education (Enter 1 if 'Graduate', 0 otherwise) = "))

          Education (Enter 1 if 'Graduate', 0 otherwise) = 1

In [144]: i11 = int(input("Credit History (Enter 1 if no pending loans, 0 otherwise) = "))

          Credit History (Enter 1 if no pending loans, 0 otherwise) = 1
```

```
In [35]: result = grid.predict(df_test)
         if result[0]==1:
             display(Image(url= "Yes.jpg", width=400, height=400))
         else:
             display(Image(url= "No.jpg", width=400, height=400))
```

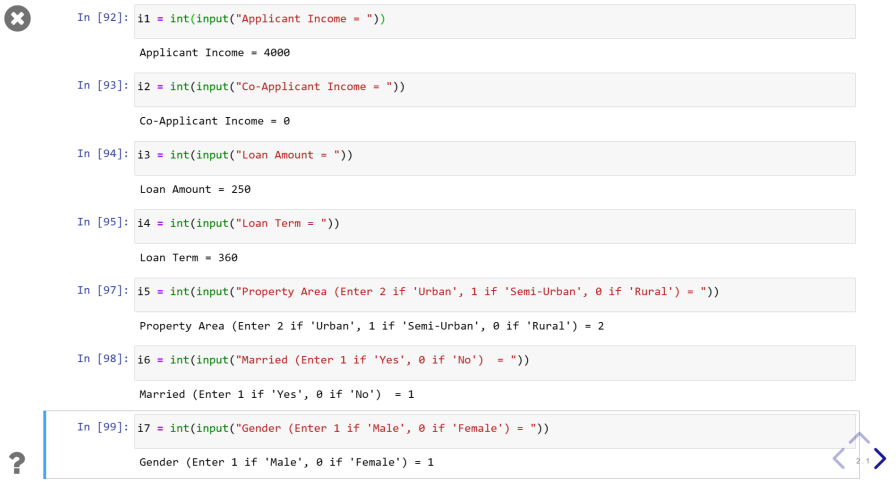
4. When your Income is Okayish but you have no dependents and the Loan amount is also low then more likely your loan will be approved and our model also shows the same.

```
In [149]: i1 = int(input("Applicant Income = "))
          Applicant Income = 2500
In [150]: i2 = int(input("Co-Applicant Income = "))
          Co-Applicant Income = 1000
In [151]: i3 = int(input("Loan Amount = "))
          Loan Amount = 120
In [152]: i4 = int(input("Loan Term = "))
          Loan Term = 360
In [153]: i5 = int(input("Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = "))
          Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = 0
In [154]: i6 = int(input("Married (Enter 1 if 'Yes', 0 if 'No')  = "))
          Married (Enter 1 if 'Yes', 0 if 'No')  = 1
In [155]: i7 = int(input("Gender (Enter 1 if 'Male', 0 if 'Female') = "))
          Gender (Enter 1 if 'Male', 0 if 'Female') = 1
```

```
In [156]: i8 = int(input("Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or
          Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or more Dependen
          ts) = 0
In [157]: i9 = int(input("Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')"))
          Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')0
In [158]: i10 = int(input("Education (Enter 1 if 'Graduate', 0 otherwise) = "))
          Education (Enter 1 if 'Graduate', 0 otherwise) = 0
In [159]: i11 = int(input("Credit History (Enter 1 if no pending loans, 0 otherwise) = "))
          Credit History (Enter 1 if no pending loans, 0 otherwise) = 1
```

```
In [161]: result = grid.predict(df_test)
          if result[0]==1:
              display(Image(url= "Yes.jpg", width=400, height=400))
          else:
              display(Image(url= "No.jfif", width=400, height=400))
```

5. When the Source of Income of the Family is only one person and there are many dependents then more likely your loan will not be approved and our model also shows the same.



```
In [92]: i1 = int(input("Applicant Income = "))
         Applicant Income = 4000
In [93]: i2 = int(input("Co-Applicant Income = "))
         Co-Applicant Income = 0
In [94]: i3 = int(input("Loan Amount = "))
         Loan Amount = 250
In [95]: i4 = int(input("Loan Term = "))
         Loan Term = 360
In [97]: i5 = int(input("Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = "))
         Property Area (Enter 2 if 'Urban', 1 if 'Semi-Urban', 0 if 'Rural') = 2
In [98]: i6 = int(input("Married (Enter 1 if 'Yes', 0 if 'No')  = "))
         Married (Enter 1 if 'Yes', 0 if 'No')  = 1
In [99]: i7 = int(input("Gender (Enter 1 if 'Male', 0 if 'Female') = "))
         Gender (Enter 1 if 'Male', 0 if 'Female') = 1
```

```
In [100]: i8 = int(input("Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or
          Number of Dependents (Enter 0 if 0 Dependents, 1 if 1 Dependent, 2 if 2 Dependents, 3 if 3 or more Dependen
          ts) = 3
In [101]: i9 = int(input("Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')"))
          Wether you are self Employed or not? (Enter 1 if 'Yes', 0 if 'No')1
In [102]: i10 = int(input("Education (Enter 1 if 'Graduate', 0 otherwise) = "))
          Education (Enter 1 if 'Graduate', 0 otherwise) = 1
In [103]: i11 = int(input("Credit History (Enter 1 if no pending loans, 0 otherwise) = "))
          Credit History (Enter 1 if no pending loans, 0 otherwise) = 1
```

```
In [35]: result = grid.predict(df_test)
         if result[0]==1:
             display(Image(url= "Yes.jpg", width=400, height=400))
         else:
             display(Image(url= "No.jpg", width=400, height=400))
```