**UNIT TESTING FOR PAYROLL APPLICATON**

Code for password validation:

Password is only authenticated in our app if:

1. It contains more than 8 characters and

2. It contains a upper case letter and

3. It contains a lower case letter and

4. It contains a number and

5. It contains a special character

Following test were conducted for password validation:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Step sr. | Step Description | Action | Test Data | Expected Results | Actual Results | Comments |
| 1. | Test if password is authenticated without letters | python -m unittest test\_payroll  password\_checker("12345678") | "12345678" | False | False | Pass |
| 2. | Test if password is authenticated without special characters | python -m unittest test\_payroll  password\_checker("Apple1234") | "Apple1234" | False | False | Pass |
| 3. | Test if password is authenticated without small letters | python -m unittest test\_payroll  password\_checker("APPLE1234#") | "APPLE1234#" | False | False | Pass |
| 4. | Test if password is authenticated without  Capital  letters | python -m unittest test\_payroll  password\_checker("apple1234#") | "apple1234#" | False | False | Pass |
| 5. | Test if password is authenticated without numbers | python -m unittest test\_payroll  password\_checker("Apple###") | "Apple###" | False | False | Pass |
| 6. | Test if password is authenticated for less than 8 characters | python -m unittest test\_payroll  (password\_checker("Apple1#") | "Apple1#" | False | False | Pass |
| 7. | Test if password is authenticated for sting more than 8 characters long,  including a number, a uppercase , a lowercase and a special character | python -m unittest test\_payroll  password\_checker("Apple1234#") | "Apple1234#" | True | True |  |

Code for unit testing:

import unittest

from payroll import password\_checker

class TestPasswordAuthentication(unittest.TestCase):

def test\_password(self):

self.assertEqual(password\_checker("12345678"),False)

self.assertEqual(password\_checker("Apple1234"),False)

self.assertEqual(password\_checker("APPLE1234#"),False)

self.assertEqual(password\_checker("apple1234#"),False)

self.assertEqual(password\_checker("Apple###"),False)

self.assertEqual(password\_checker("Apple1#"),False)

self.assertEqual(password\_checker("Apple1234#"),True)

Test conducted conducted by 30013584.All passed