Credit Card Validator

Write a program that will determine the validity of a credit card number

Write 7 methods:

Main Method:

- Get a credit card number from the user's input
- Verify the credit card is valid by calling the methods below

Credit card type Method:

- Determine the credit card type
- If first Digit is:
  - 4 – Visa
  - 5 – Master Card
  - 6 - Discover
- If first 2 digits are:
  - 37 - American Express
  - 38 – Diner's Club

Credit card length Method

- Length must be 15, or 16 Digits

Add Doubled Evens Method:

- Starting with the 2nd digit every other digit must be doubled and added to a return total.
- If 2* the digit is greater than 9, use (2 * (digit)) % 10)) + 1)

Add the Odd digits method:

- Starting with the 1st digit add and return the total.

Add Evens and Odds

- Add the Doubled Evens total to the Odd digit total and return.

Verify Evens and Odds

- Verify OddsEvens total is evenly divisible by 10, return true or false

Fake Credit card numbers for testing, you can also test your own CC numbers.

```
ccNumber="54618402626";          invalid test ccNumber
ccNumber="438471726";            invalid test ccNumber
ccNumber="3758402626548";        invalid test ccNumber
ccNumber="4388576018402626";     invalid test ccNumber
ccNumber = "4388576018410707";   valid test ccNumber
```

Output:

```
Enter credit card number:
4388576018410707
Doubled Evens: 29
Odds Added: 41
Odds + Doubled Evens: 70
Card is a Visa
Credit card length is valid
Odds + DoubledEven is evenly divisible by 10 so it is valid
Credit card number is valid

Process finished with exit code 0
```