Python Practicals

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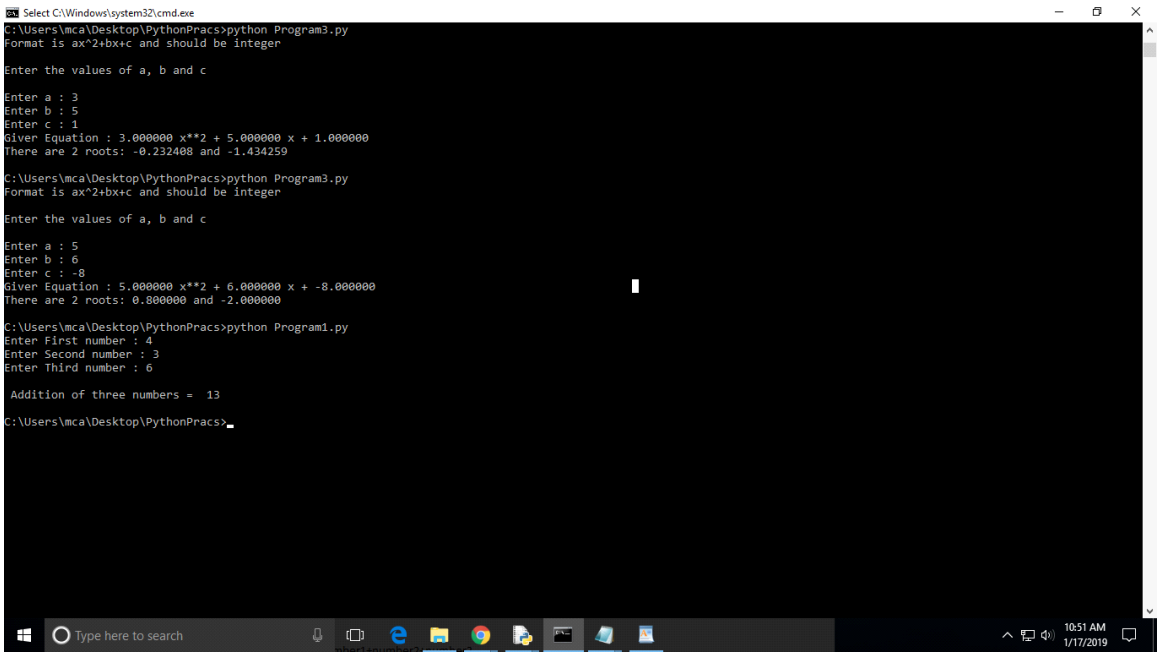
Batch : A

Q1) Add Three Numbers

Code :

```
number1 = int(input('Enter First number : '))

number2 = int(input('Enter Second number : '))

number3 = int(input('Enter Third number : '))


s = number1+number2+number3


print("\n Addition of three numbers = ",s)
```

Screenshot :



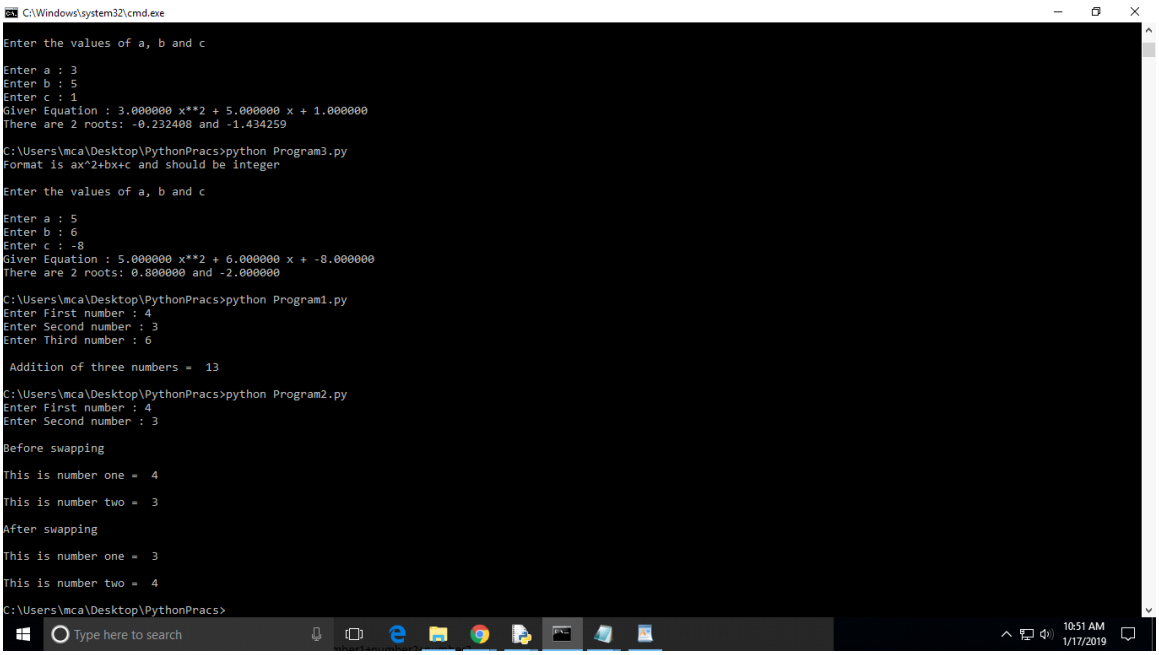
Q2) To Swap two numbers

Code :

```
number1 = int(input('Enter First number : '))

number2 = int(input('Enter Second number : '))


print("\nBefore swapping")

print("\nThis is number one = ",number1)

print("\nThis is number two = ",number2)


temp = number1

number1 = number2

number2 = temp
```

```
print("\nAfter swapping")


print("\nThis is number one = ",number1)

print("\nThis is number two = ",number2)
```

Screenshot :



Q3) Calculate area of triangle given 3 sides of triangle

Code :

```
import math


a = int(input('Enter First number : '))

b = int(input('Enter Second number : '))

c = int(input('Enter Third number : '))


p = a+b+c
```

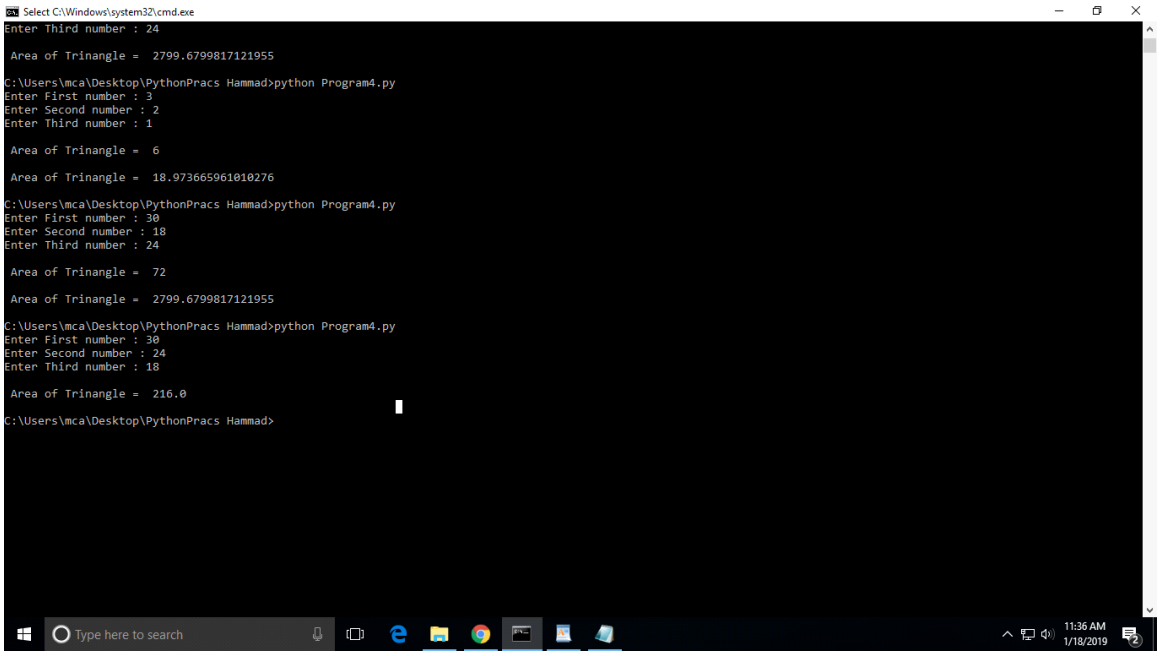
p = p/2

temp = p*(p-a)*(p-b)*(p-c)

area = math.sqrt(temp)

print("\n Area of Trinangle = ",area)

Screenshot :



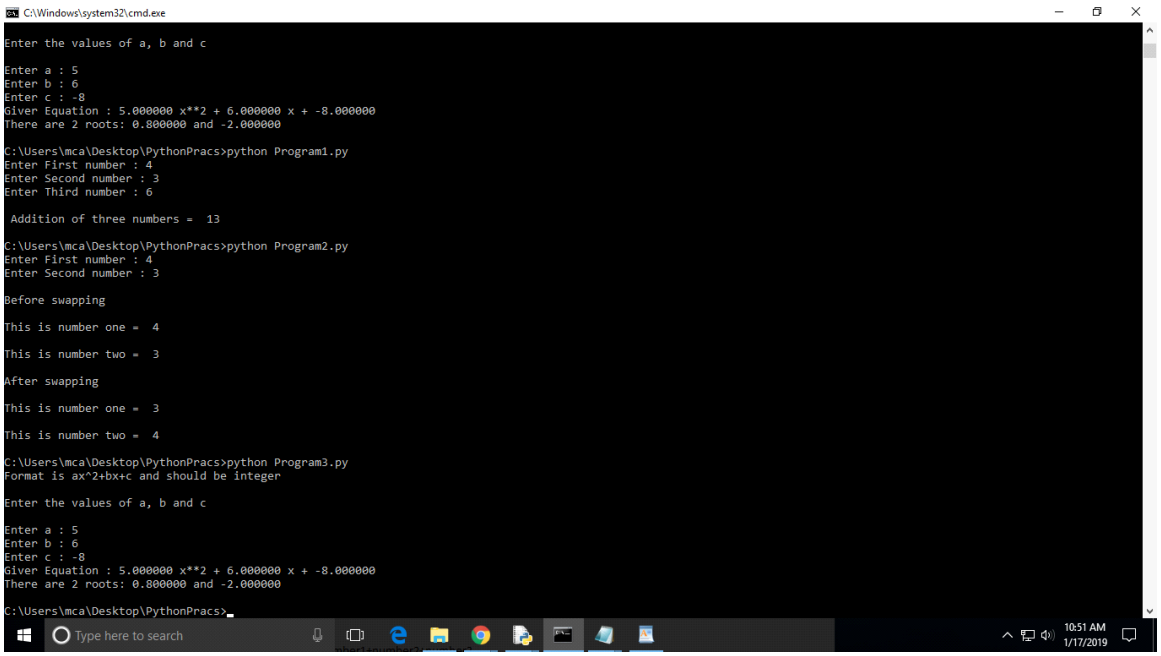
Q4) Find the roots of the quadratic equation

Code :

import math

```
print("Format is ax^2+bx+c and should be integer\n")

print("Enter the values of a, b and c \n")


a = float(input('Enter a : '))

b = float(input('Enter b : '))

c = float(input('Enter c : '))


print("Giver Equation : %f x**2 + %f x + %f "%(a,b,c))


u = b**2 - 4*a*c

u = math.sqrt(u)


r1 = (((-b) + u)/(2*a))

r2 = (((-b) - u)/(2*a))


print("There are 2 roots: %f and %f" % (r1, r2))
```

Screenshot :



Q5) To use bitwise operators

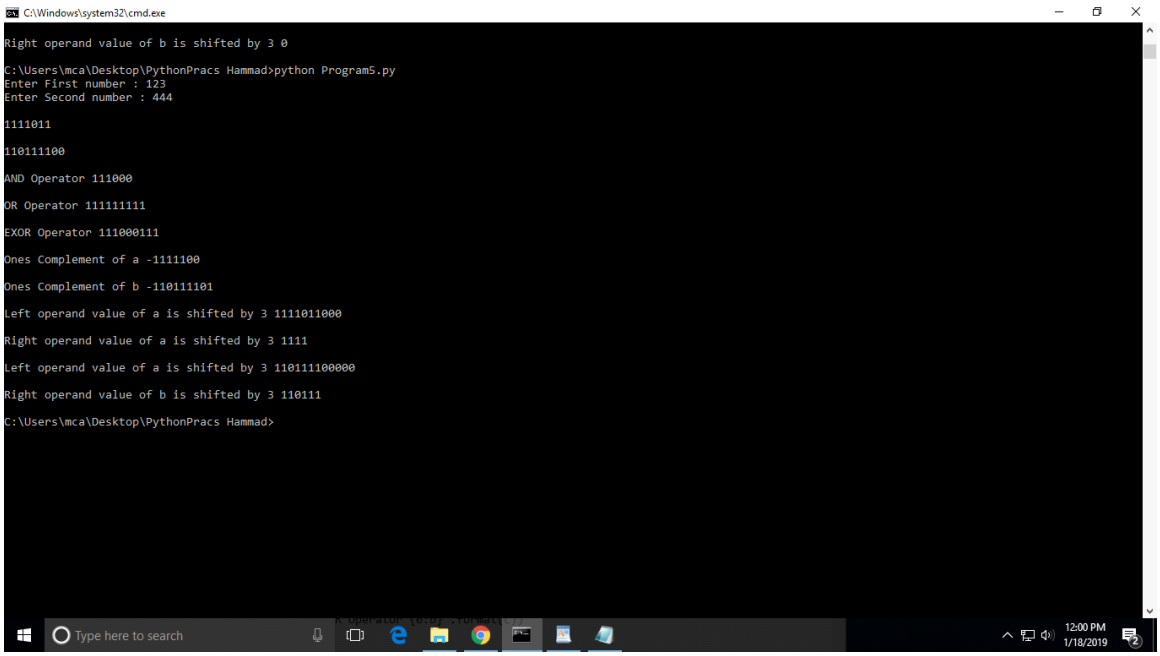
Code :

```
a = int(input('Enter First Number : '))

b = int(input('Enter Second Number : '))


print ("\n{0:b}".format(a))

print ("\n{0:b}".format(b))



c = a & b


print ("\nAND Operator {0:b}".format(c))


c = a | b
```

```
print ("\nOR Operator {0:b}".format(c))

c = a ^ b

print ("\nEXOR Operator {0:b}".format(c))

c = ~ a

print ("\nOnes Complement of a {0:b}".format(c))

c = ~ b
print ("\nOnes Complement of b {0:b}".format(c))

c = a << 3

print ("\nLeft operand value of a is shifted by 3 {0:b}".format(c))

c = a >> 3

print ("\nRight operand value of a is shifted by 3 {0:b}".format(c))

c = b << 3

print ("\nLeft operand value of a is shifted by 3 {0:b}".format(c))
```

```
c = b >> 3

print ("\nRight operand value of b is shifted by 3 {0:b}".format(c))
```

Screenshot



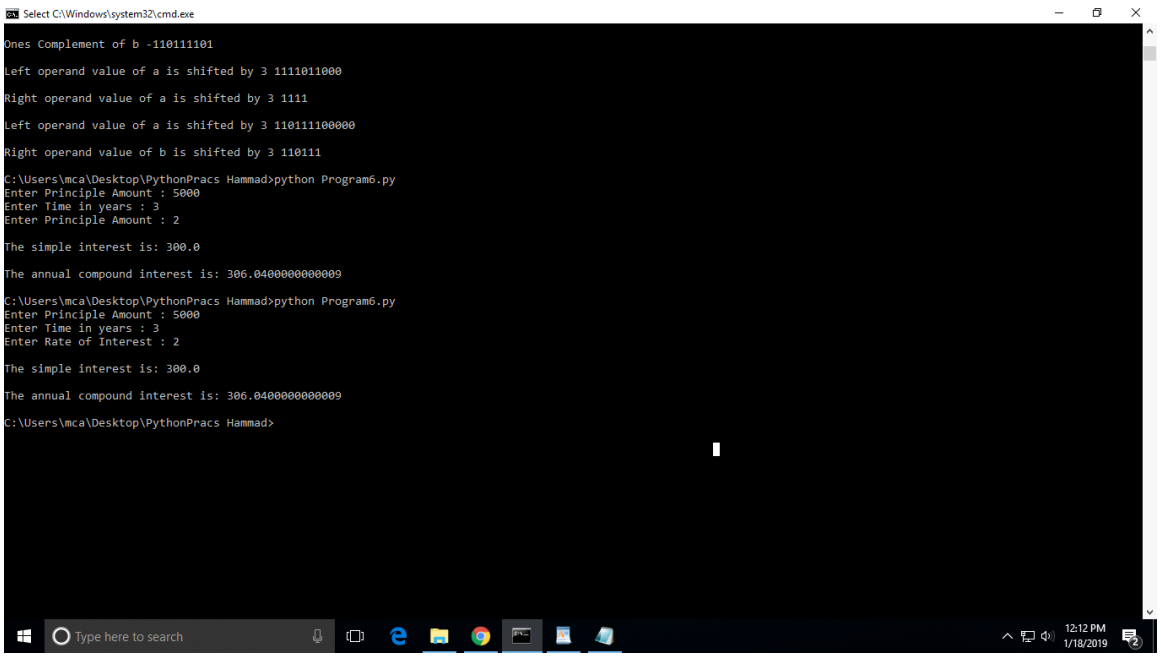
Q6) To compute compound interest given all the required values.

Code :

```
p = float(input('Enter Principle Amount : '))

t = int(input('Enter Time in years : '))

r = float(input('Enter Rate of Interest : '))

si=(p*t*r)/100
```

```
print("\nThe simple interest is:",si)

a = p*(1+(r/100))**t

ci = a-p

print("\nThe annual compound interest is:",ci)
```

Screenshot



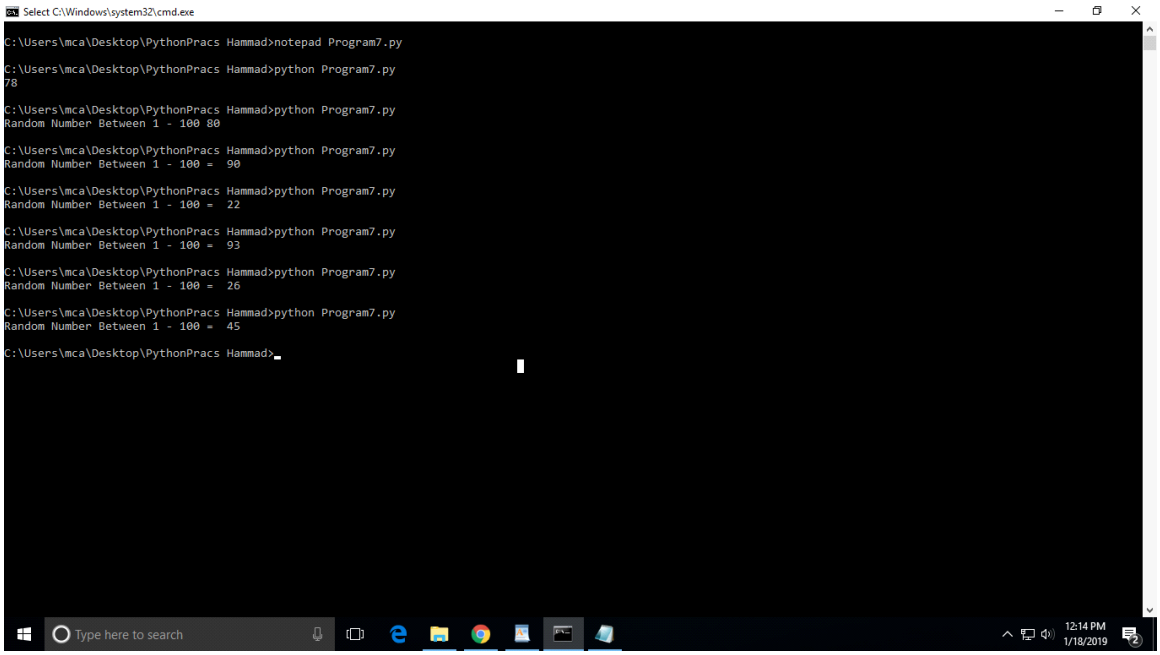
Q7) To generate a random number between 0 and 100

Code :

```
from random import randint
```

print("Random Number Between 1 - 100 =\t",randint(0, 100))

Screenshot



Q8) To display calendar for the January 2019

Code :

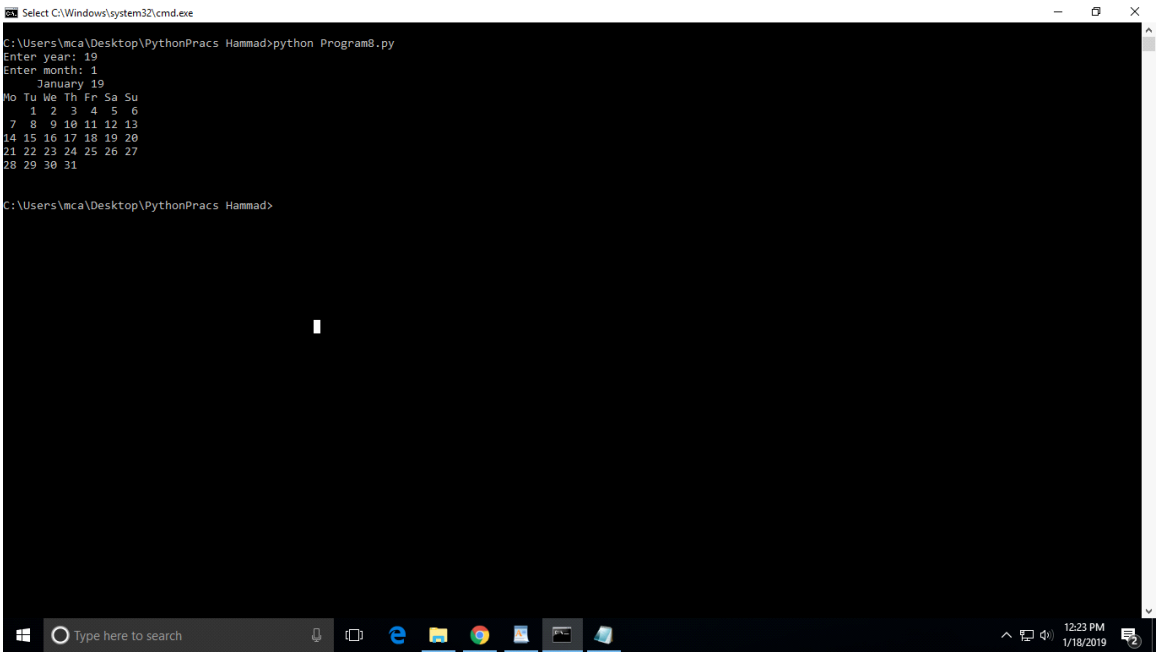
import calendar

year = int(input("Enter year: "))

month = int(input("Enter month: "))

print(calendar.month(year, month))

Screenshot

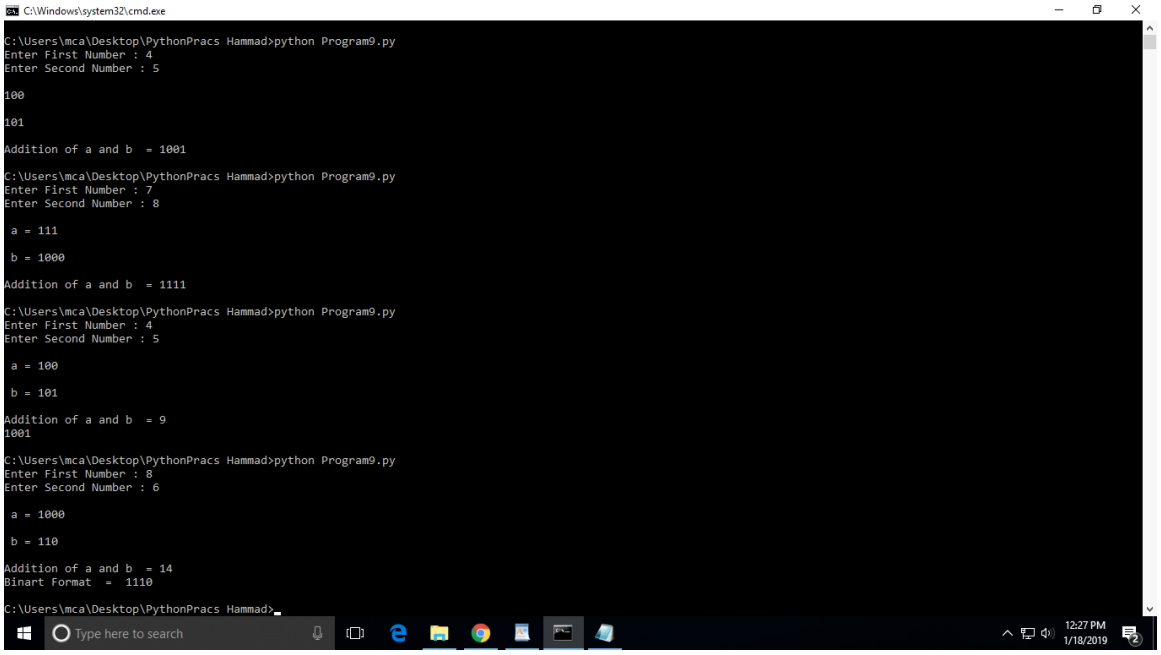


Q9) To add two binary numbers

Code :

```
a = int(input('Enter First Number : '))

b = int(input('Enter Second Number : '))


print ("\n a = {0:b}".format(a))

print ("\n b = {0:b}".format(b))



c = a + b

print ("\nAddition of a and b     =",c)

print ("Binart Format     =     {0:b}".format(c))
```

Screenshot


C:\Windows\system32\cmd.exe
C:\Users\mca\Desktop\PythonPracs Hammad>python Program9.py
Enter First Number : 4
Enter Second Number : 5
100
101
Addition of a and b = 1001
C:\Users\mca\Desktop\PythonPracs Hammad>python Program9.py
Enter First Number : 7
Enter Second Number : 8
a = 111
b = 1000
Addition of a and b = 1111
C:\Users\mca\Desktop\PythonPracs Hammad>python Program9.py
Enter First Number : 4
Enter Second Number : 5
a = 100
b = 101
Addition of a and b = 9
1001
C:\Users\mca\Desktop\PythonPracs Hammad>python Program9.py
Enter First Number : 8
Enter Second Number : 6
a = 1000
b = 110
Addition of a and b = 14
Binart Format = 1110
C:\Users\mca\Desktop\PythonPracs Hammad>
Type here to search
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