

PC

cse

Command

string

exp

a1

 binary.py - C:\Users\hp\Desktop\binary.py (3.10.4)

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```
num=input("Enter the number:")  
a=int(num) # num input is stored as string  
b=bin(a) # to find the binary equivalent  
b1= b[2:]  
print(b1)
```

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class

ol Pa

```
>> 0b1010
>> ===== RESTART: C:\Users\hp\Desktop\binary.py =====
Enter the number:10
1010
>> |
```

calculator.py - C:\Users\hp\Desktop\calculator.py (3.10.4)

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```
num1=int(input())#to get the first operand
op=input()#to get the operator
num2=int(input())#to get second operand
if(op=='+'):
    print(num1+num2)
elif(op=='-'):
    print(num1-num2)
elif(op=='/'):
    print(num1/num2)
elif(op=='*'):
    print(num1*num2)
else:
    print("Syntax Error")# if any other operator is entered out of scope this error will be generated
```

>>>

===== RESTART: C:\Users\hp\Desktop\calculator.py =====

10

+

11

21

>>>

#to get the first operand

exp.py - C:\Users\hp\Desktop\exp.py (3.10.4)

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import math

a=(3+4)\*5

print(a)

n=int(input())

b= (n\*\*2-n)/2

print(b)

r=int(input("Enter the value of r:"))

a=int(input("Enter the value of a:"))

print(4\*math.pi\*(r\*\*2)) # Math.pi() gives value of pi

c= math.sqrt(r\*(math.cos(a)\*\*2+ r\*(math.sin(b)\*\*2)) #Math.cos() returns cosine a

print(c)

```
>>>===== RESTART: C:/Users/hp/Desktop/exp.py =====>>>
35
10
45.0
Enter the valor of r:1
Enter the value of a:90
12.566370614359172
0.961668744181517
>>>
```

\*IDLE Shell 3.10.4\*

File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:/Users/hp/AppData/Local/Programs/Python/Python310/q4.py =====

In the range(5):

0  
1  
2  
3  
4

In the range(3, 10):

3  
4  
5  
6  
7  
8  
9

In the range(4, 13, 3):

4  
7  
10

In the range(15, 5, -2):

15  
13  
11  
9  
7

In the range(5, 3):

```
print("In the range(5): ")
for i in range(5):
    print(i)
```

```
print("In the range(3, 10): ")
for i in range(3, 10):
    print(i)
print('\n')
```

```
print("In the range(4, 13, 3): ")
for i in range(4, 13, 3):
    print(i)
print('\n')
```

```
print("In the range(15, 5, -2): ")
for i in range(15, 5, -2):
    print(i)
print("\n")
```

```
print("In the range(5, 3): ")
for i in range(5, 3):
    print(i)
print("\n")
```



q5.py - C:\Users\hp\Desktop\q5.py (3.10.4)

File Edit Format Run Options Window Help

```
print(''''This program computes molecular weight of
carbohydrates, for this we need to enter number of
atoms of hydrogen, carbon and oxygen.'''')
#number of atoms cannot be negative
num_hydrogen = int(input("Enter the number of hydrogen atoms: "))
num_carbon = int(input("Enter the number of carbon atoms:"))
num_oxygen = int(input("Enter the number of oxygen atoms:"))

# now calculating the weight of elements by multiplying their number of atoms and atomic mass
weight_of_hydrogen = num_hydrogen*1.00794
weight_of_carbon = num_carbon*12.0107
weight_of_oxygen = num_oxygen*15.9994

#weight of carbohydrate would be sum of weight of hydrogen , oxygen and carbon
weight_of_carbohydrate = weight_of_hydrogen + weight_of_carbon + weight_of_oxygen
print("The weight of carbohydrate: ", weight_of_carbohydrate)
```

Python 3.10.4

File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:/Users/hp/AppData/Local/Programs/Python/Python310/q5.py =====

This program computes molecular weight of  
carbohydrates, for this we need to enter number of  
atoms of hydrogen, carbon and oxygen.

Enter the number of hydrogen atoms: 6

Enter the number of carbon atoms: 2

Enter the number of oxygen atoms: 1

The weight of carbohydrate: 46.06844

>>>