Assignment-1

Python Programming

Assignment Date	03.10.2022
Student Name	JUWAIRIYA.M.F
Team id	PNT2022TMID44156
Student Roll Number	724019104007
Maximum Marks	2 MARKS

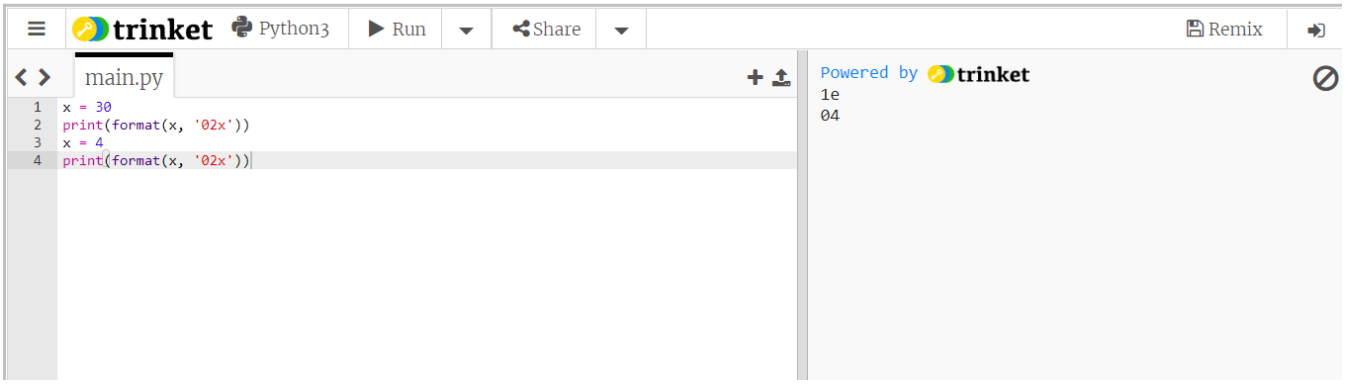
Question-1:

Write a python program to convert decimal to hexadecimal.
Sample decimal number: 30, 4
Expected output: 1e, 04

Solution:

```
x = 30

print(format(x, '02x'))

x = 4 print(format(x, '02x'))
```

Output:



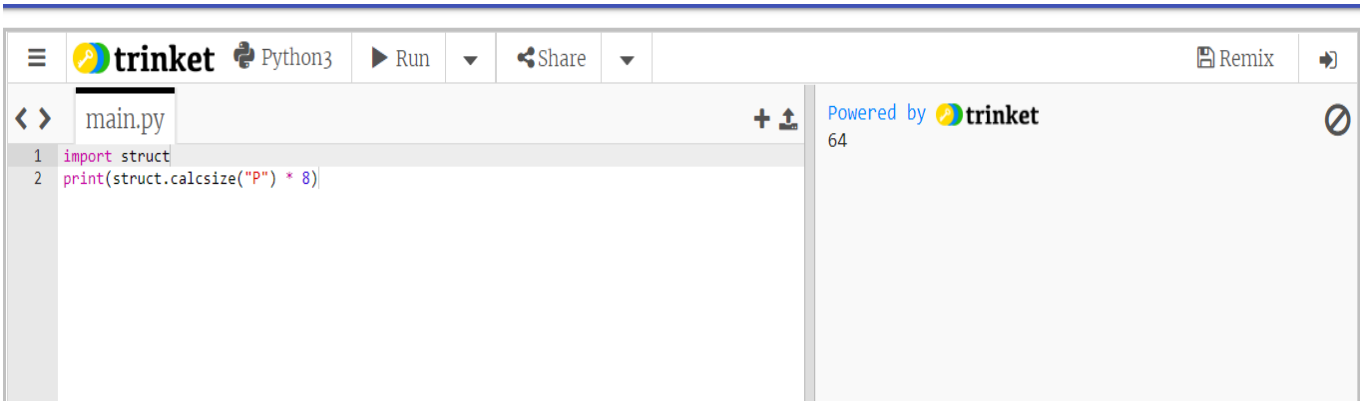
Question-2:

Write a Python program to determine if the python shell is executing in 32bit or 64bit mode on operating system.

Solution:

```
import struct

print(struct.calcsize("P") * 8)
```

Output:



Question-3:

Write a Python function to check whether a number is divisible by another number. Accept two integers values form the user.

Solution:

```
def multiple(m, n):

return True if m % n == 0 else False

 print(multiple(20, 5))

print(multiple(7, 2))
```

Output:

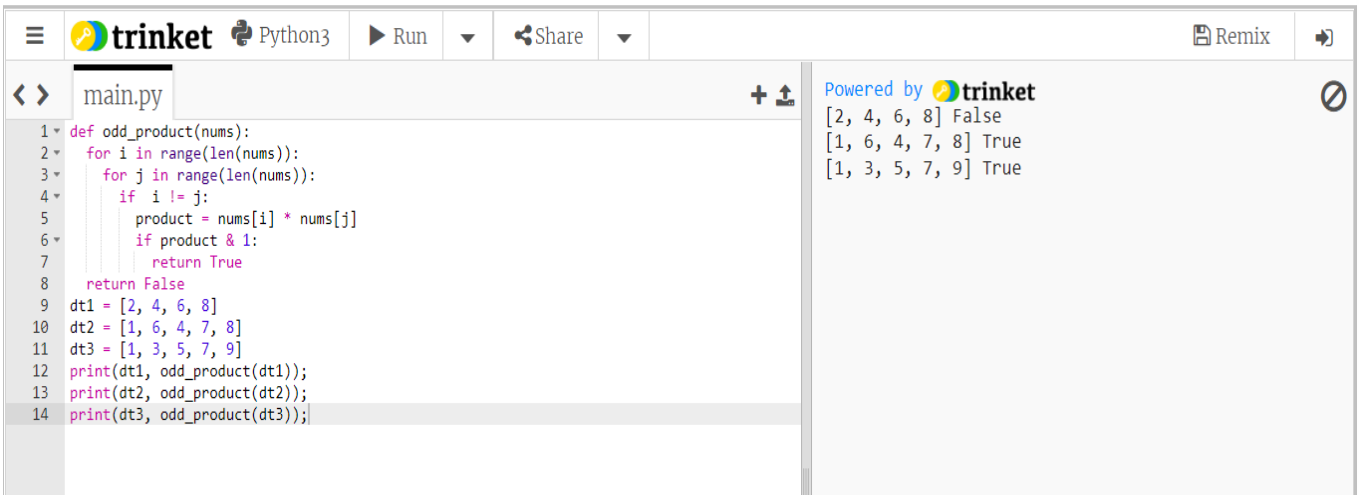
Question-4:

Write a Python function to check whether a distinct pair of numbers whose product is odd present in a sequence of integer values

Solution:

```
def odd_product(nums):
for i in range(len(nums)):
 for j in range(len(nums)):
 if i != j: product = nums[i] * nums[j]
if product & 1:
 return True
return False dt1 = [2, 4, 6, 8] dt2 = [1, 6, 4, 7, 8] dt3 = [1, 3, 5, 7, 9]
print(dt1, odd_product(dt1));
print(dt2, odd_product(dt2));
 print(dt3, odd_product(dt3));
```

Output:



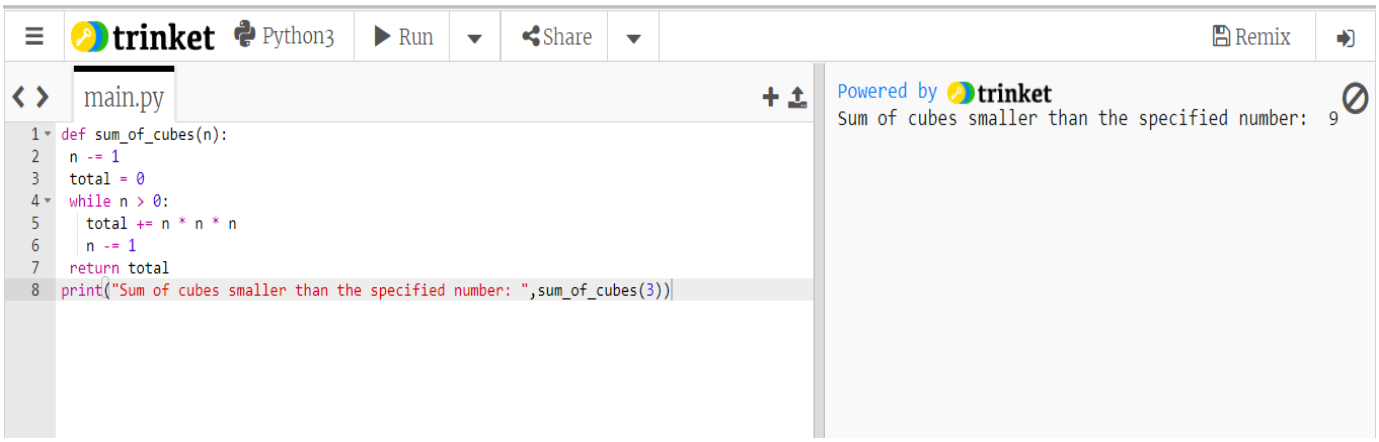
Question-5:

Write a Python function that takes a positive integer and returns the sum of the cube of all the positive integers smaller than the specified number.

Solution:

```
def sum_of_cubes(n):

n -= 1

 total = 0

while n > 0:

total += n * n * n n -= 1

return total

print("Sum of cubes smaller than the specified number:",sum_of_cubes(3))
```

Output:


trinket
Python3
Run
Share
Remix
main.py
def sum_of_cubes(n):
n -= 1
total = 0
while n > 0:
total += n * n * n
n -= 1
return total
print("Sum of cubes smaller than the specified number: ",sum_of_cubes(3))
Powered by trinket
Sum of cubes smaller than the specified number: 9