

ABHISHEK SHARMA

CS 2ND YEAR

SECTION : "I"

ROLL NO.: 01

ENROLLMENT NO.: 12019009001127

SUBJECT : DATA STRUCTURE AND ALGORITHM LAB

[WEEK : 3]

ASSIGNMENT : 3

HACKERRANK ID : 12019009001127_I

DATE : 20.07.2020

Q1. Write a Python program to get the volume of a sphere with radius 6.

CODE & OUTPUT :

```
In [6]: pi = 3.14  
r = 6  
a = 4/3  
v = a*pi*r*r*r  
print ("{}".format(v))
```

904.3199999999998

Q2. Write a Python program to find whether a given number (accept from the user) is even or odd, print out an appropriate message to the user.

CODE :

```
x = int(input())  
if (x%2 == 0):  
    print ("the given no is even")  
else :  
    print ("the given no is odd")
```

OUTPUT :

Testcase 0 ✓

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

2

Your Output (stdout)

the given no is even

Expected Output

the given no is even

Q3. Write a Python program which accepts the radius of a circle from the user and compute the area.

CODE & OUTPUT :

```
pi = 3.14  
r = float(input())  
area = pi * r * r  
print ("area = {:.2f}".format(area))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

2

Your Output (stdout)

area = 12.56

Expected Output


area = 12.56

Q4. Write a Python program that will accept the base and height of a triangle and compute the area

CODE :

```
x = int(input())
y = int(input())
area = 0.5*x*y
print ("area = %d"%(area))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
5
6
```

Your Output (stdout)

```
area = 15
```

Expected Output

```
area = 15
```

Q5. Write a Python program to subtract the smaller number from the larger number if both are an integer type. Take the numbers as user input

CODE :

```
x = int(input())
```

```
y = int(input())
```

```
if (x>y):
```

```
    s = x - y
```

```
else :
```

```
    s = y - x
```

```
print (s)
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
4
5
```

Your Output (stdout)

```
1
```

Expected Output

```
1
```

Q6. Write a Python program to display details like name, age, address in three different lines. Take the name, age and adress as user input.

CODE :

```
x = input()
y = input()
z = input()
```

```
print (x)
print (y)
print (z)
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
Sherlock Holmes
40
221b, Baker Street, London
```

Your Output (stdout)

```
Sherlock Holmes
40
221b, Baker Street, London
```

Expected Output


```
Sherlock Holmes
40
221b, Baker Street, London
```

Q7. Write a Python program to solve $(x + y) * (x + y)$.

CODE :

```
x=int(input())
y=int(input())
z=(x+y)*(x+y)
print("{}".format(z))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
2
3
```

Your Output (stdout)

```
25
```

Expected Output


```
25
```

Q8. Write a Python program to convert seconds to day, hour, minutes and seconds.

CODE :

```
time = float(input())
day = time // (24 * 3600)
time = time % (24 * 3600)
hour = time // 3600
time %= 3600
minutes = time // 60
time %= 60
seconds = time
print("%d days %d hours %d minutes %d seconds" % (day, hour, minutes, seconds))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
129600
```

Your Output (stdout)

```
1 days 12 hours 0 minutes 0 seconds
```

Expected Output

```
1 days 12 hours 0 minutes 0 seconds
```


Q9. Write a Python program to sort three integers using conditional statements.

CODE :

```
a=int(input())
b=int(input())
c=int(input())
list1=[]
pok=list1.append(a)
list1.append(b)
list1.append(c)
list1.sort()
for i in list1:
    print("{}".format(i),end = ' ')
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
5
6
2
```

Your Output (stdout)

```
2 5 6
```

Expected Output


```
2 5 6
```

Q10. Given variables x and y, write a Python program to print"x+y=sum of x+y". x,y should be user input.

CODE :

```
x=int(input())  
y=int(input())  
print("{}+{} = {}".format(x,y,x+y))
```

OUTPUT :

Testcase 0 

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
20  
30
```

Your Output (stdout)

```
20+30 = 50
```

Expected Output

```
20+30 = 50
```