

What will be the output of the following codes?	output
<pre> a,b=5,7 if a>6: print("k") elif b>5: print("kavit") if a>4: print("kavit10") elif b>6: print("10kavit") if a==5 and b==7: print("kms10") else: print(i) </pre>	
<pre> sum=0 for i in range(1,15): if i%4==0: sum+=3 continue i+=5 if i%3==0: sum+=7 continue else: sum+=2 sum+=3 else: sum+=3 print(sum) </pre>	
<pre> a=5 if a>4: print('hi') a+=8 elif a>6: print("uy") </pre>	
<pre> def pr(x): msg=str(v) v="hi" print(msg) global v v=6 pr('u') </pre>	
<pre> def pr(x): global v msg=str(v) print(type(v)) v="hi" print(v) global v v=6 pr('u') </pre>	
<pre> def pr(x): global v msg=str(v) print(msg) v=9 </pre>	

<pre> print(v) def nb(y): print(v) v="nh" print(v) global v v="v10" pr(v) nb('p') </pre>	
<pre> def f(): print("kavit10") def f(): print("10kavit") f() </pre>	
<pre> g() def g(): print("li") </pre>	
<pre> sum=0 count=0 while count>15: sum+=3 if sum==3: count+=5 else: count+=9 else: count+=2 print(sum,count) </pre>	
<pre> x=0 while x<15: if x%3==0: x+=5 continue if x%2==0: x+=14 else: x+=1 else: x+=1 print(x) </pre>	
<pre> for i in range(1,5): if i%2==0: count=i elif i%3==0: count+=5 count=1 if i==4: i+=2 continue else: count=5 else: print(f"count is {count}") print(f"i is {i}") </pre>	

Q-1. Python program to check if the given number is Happy Number

A number is said to be happy if it yields 1 when replaced by the sum of squares of its digits repeatedly. If this process results in an endless cycle of numbers containing 4, then the number will be an unhappy number.

Let's understand by an example:

Number = 32

$$3^2 + 2^2 = 13$$

$$1^2 + 3^2 = 10$$

$$1^2 + 0^2 = 1$$

Q-2 Python Program to Find All Pythagorean Triplets in the Range pythagorean triplets are the three numbers which follows pythagoros therom, $a^2+b^2=c^2$ -->then a,b,c is triplets.

Enter upper limit:10

3 4 5

8 6 10

Enter upper limit:20

3 4 5

8 6 10

5 12 13

15 8 17

12 16 20

Q-3 add money in your piggy bank. start from monday with rs.1. increase rs.1 every day. next monday start with rs. 2 ...follow same as...calculate money after 30 days

enter day: 30

165

Q-4 draw a pattern

Enter row: 7

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1 5 10 10 5 1

1 6 15 20 15 6 1

Q-5 A Disarium number is a number that is equal to the sum of its digits raised to the power of their respective positions.

Enter a number: 89

89 is a Disarium number.