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**Assignment PF LAB:**

**Question1:Hcf**

**Input:**

def hcf(x,y):

hcf, target = 1, ((x if x<y else y)+1)

for i in range(1,target):

if x%i==0 and y%i==0:

hcf=i

return hcf

print(hcf(12,16))

output:



**Question:2**

**LCM**

**INPUT:**

def LCM (x,y):

target = x if x>y else y

while not (target % x==0 and target %y==0):

target += 1

return target

print(LCM(2,5))

**OUTPUT:**

****

**Question3:**

**Factorial:**

**Input:**

**n=int(input("Enter a number"))**

**i=1**

**multiply=1**

**while i < n + 1:**

**multiply \*= i**

**i += 1**

**print("The factorial number 5 is ", multiply)**

**output:**

****

**Question4;**

**HCF:**

**INPUT:**

**def HCF (x,y):**

**hcf, target=1, ((x if x < y else y) + 1)**

**for 1 in range (1,target):**

**if x % 1 == 0 and y % 1 == 0 :**

**hcf = 1**

**return hcf**

**print(HCF(100,50))**

**QUESTION5:**

**WHILE TRUE:**

**INPUT:**

**while True :**

**x=float(input("Input 1st value:"))**

**y=float(input("Input 2nd value:"))**

**operators=str(input("choose operator[\*,+,-,/,%]"))**

**if operator == '\*':**

**print(x\*y)**

**elif operator =='+':**

**print(x+y)**

**elif operator == '-':**

**print(x-y)**

**elif operator =='/':**

**print(x/y)**

**elif operator=='%':**

**print (x%y)**

**else:**

**print("Error. try again!")**

**restart=input("Restart(y/n):")**

**if restart =='n':**

**break**