PF Task

Name:Sheryar Sher

Rollnum: 21p8027

Q1:

Code:

```
# this programs gives us the factorials of the given number
fact = 1
i = 1
num = int(input('enter number: '))
while num > 1:
    fact = fact * num
    num -= 1
print(fact, "is the factorial")
```

output:

```
enter number: 5
120 is the factorial
```

Q2:

Code:

```
# this programs calculate the table of a given number

number = int(input("enter number: "))
n = 1
while n<=10:
    print(number," * ", n , " = ",number*n)
    n+=1
```

output:

```
enter number: 4
4  *  1  =  4
4  *  2  =  8
4  *  3  =  12
4  *  4  =  16
4  *  5  =  20
4  *  6  =  24
4  *  7  =  28
4  *  8  =  32
4  *  9  =  36
4  *  10  =  40
```

Q3:

```python
# this programe simple mathmathical operations for us

num = int(input('enter a number: '))

num2 = int(input('enter second number: '))

operator = int(input('press 1 for add / press 2 for sub / press 3 for mult / press 4 for div:'))

check = input("you want to continue 'Y/N':")

check = check.upper()


while check !="N":

  if check =="Y" :

    if operator == 1:

      print('sum of ',num, 'and', num2,'is:',num + num2)

    elif operator == 2:

      print('subtraction of ',num ,'and', num2,'is:',num - num2)

    elif operator == 3:

      print('product of ',num ,'and', num2,'is:',num * num2)

    elif operator == 4:

      print('division of ',num, 'and', num2,'is:',num / num2)

    else:

      print('press correct number')
```

```python
    else:
        print('Enter valid condition')
    check = input("you want to continue 'Y/N':")
    check = check.upper()
    num = int(input('enter a number: '))
    num2 = int(input('enter second number: '))
    operator = int(input('press 1 for add / press 2 for sub / press 3 for mult / press 4 for div:'))
```

output:

```
enter a number: 4
enter second number: 5
press 1 for add / press 2 for sub / press 3 for mult / press 4 for div:2
you want to continue 'Y/N':y
subtraction of  4 and 5 is: -1
you want to continue 'Y/N':2
enter a number: 3
enter second number: 4
press 1 for add / press 2 for sub / press 3 for mult / press 4 for div:2
Enter valid condition                .

you want to continue 'Y/N':|                                              |
```

Q4:

```python
# this program find the lcm of given two number
num1 = int(input("enter first number"))
num2 = int(input("enter second number"))
n = 1
while True: #run until this becomes false
    if (n%num1==0) and (n%num2==0):
        print("LCM of",num1, "and", num2, "is:",n)
        break
    else:
        n+=1
```

output:

```
enter first number5
enter second number4
LCM of 5 and 4 is: 20
```

Q4

Code:

```
num1 = int(input("enter first number"))

num2 = int(input("enter second number"))


def hcf(c,d):

    Min = min(num1,num2)

    Max = max(num1,num2)


    while True:

        if Max%Min == 0:

            a = Min

            break

        a = Max%Min

        Max = Min

        Min = a

    return a


total = hcf(num1,num2)

print('hcf of ',num1,'and',num2,'is: ', total)
```

Output:

```
enter first number4
enter second number5
hcf of  4 and 5 is:  1
```