Programming for Data Analytics – Lab 3

The following is a solution to question 1 (ii)
"""

```
def powerV1(base, power):

    print ("The value of ",base, " raised to the power of ", power, " is: ",base**power)

def main():

    base = int(input("Please enter a base number"))
    power = int(input("Please enter a power"))
    powerV1(base, power)

main()
```

"""
The following is a solution to question 1 (iii)
"""

```
def powerV1(base, power):

    return base**power

def main():

    base = int(input("Please enter a base number"))
    power = int(input("Please enter a power"))
    result = powerV1(base, power)
    print ("The value of ",base, " raised to the power of ", power, " is: ",result)

main()
```

```
"""
The following is a  solution to question 2
"""


def add(num1, num2):
    return num1+num2

def subtract(num1, num2):
    return num1-num2

def multiply(num1, num2):
    return num1*num2

def divide(num1, num2):
    return num1/num2


def main():

    exitCalc = False

    while exitCalc==False:

        num1 = int(input("Please enter number 1: - "))
        num2 = int(input ("Please enter number 2: - "))

        option = int(input("Do you want to: \n 1. Add \n 2. Subtract \n 3. Multiply \n 4.
Divide  :"))

        if option == 1:
            result = add(num1, num2)
        elif option ==2:
            result = subtract(num1, num2)
        elif option ==3:
            result = multiply(num1, num2)
        else:
            result = divide(num1, num2)

        print ("Result is ", result)

        exit = input("Do you want to exit y/n")

        if exit == 'y':
            exitCalc = True


main()
```

"""
The following is a solution to question 2
"""

```
def printReverseTriangle(limit):

    for num in range(1, limit+1):

        for spaces in range (limit-num):

            print " ",

        for numbers in range(num):

            print num,
        print ""


def main():
    limit = input("Enter upper limit of numbers")
    printReverseTriangle(limit)


main()
```