Java Lab

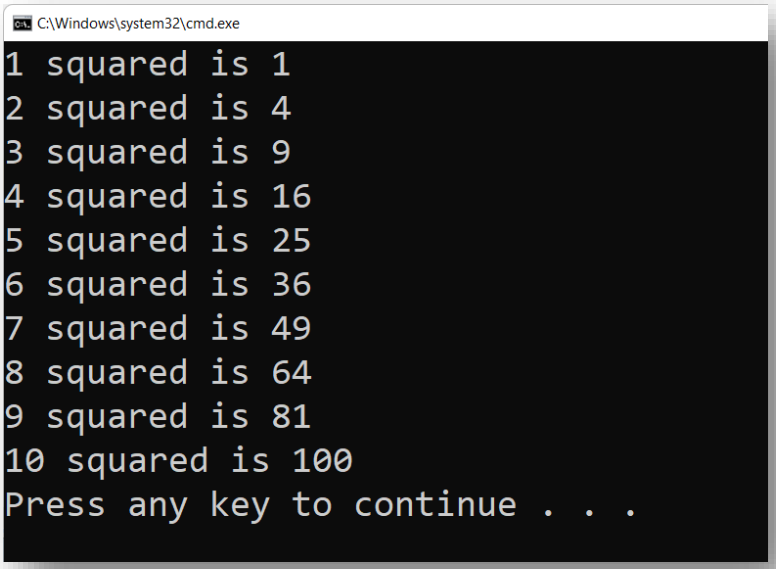
While Loops

IMPORTANT! Save all your work to a safe location such as oneDrive.

Create a folder for SDPD into which you will save all your work for this module, arranged how you wish. Ideally you should create a folder each week for your lab exercises. Note that you should create **a separate file** for each exercise.

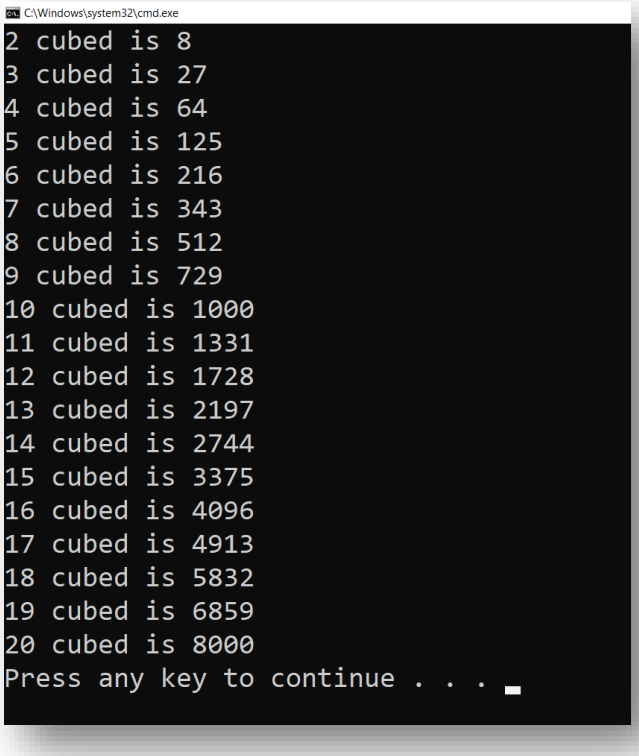
Exercise 1

Write a program called *SquareOfNumbers* that prints the square of the numbers from 1 to 10.



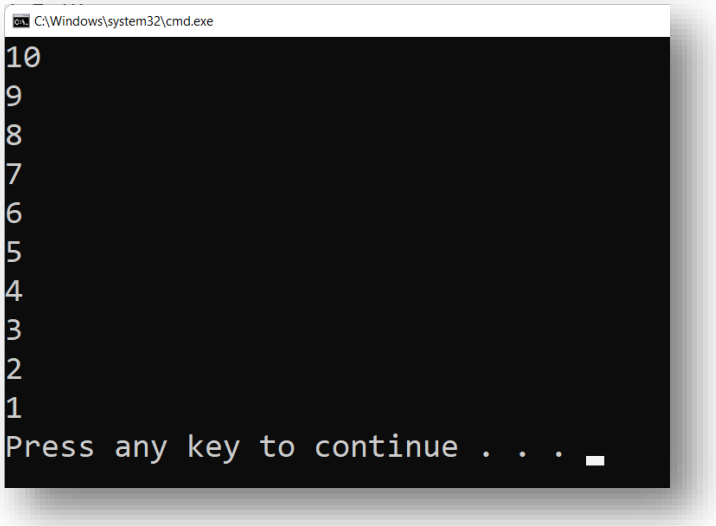
Exercise 2

Write a program called *CubeOfNumbers* that prints the cube of the numbers from 2 to 20.



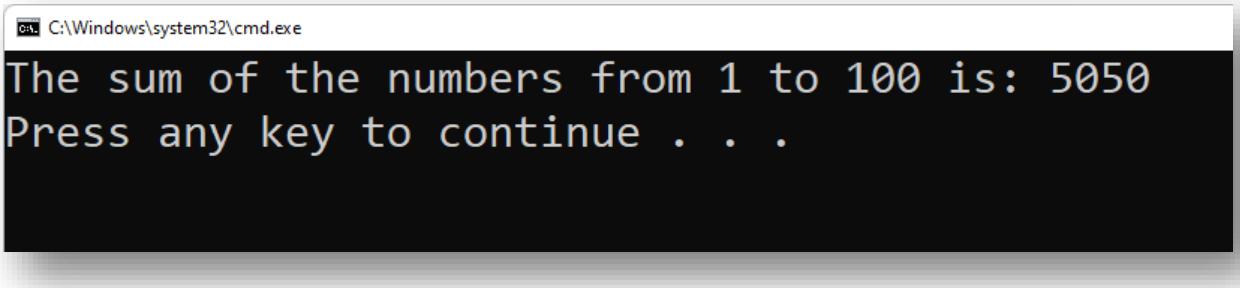
Exercise 3

Write a program that prints the numbers from 1 to 10 in reverse order.



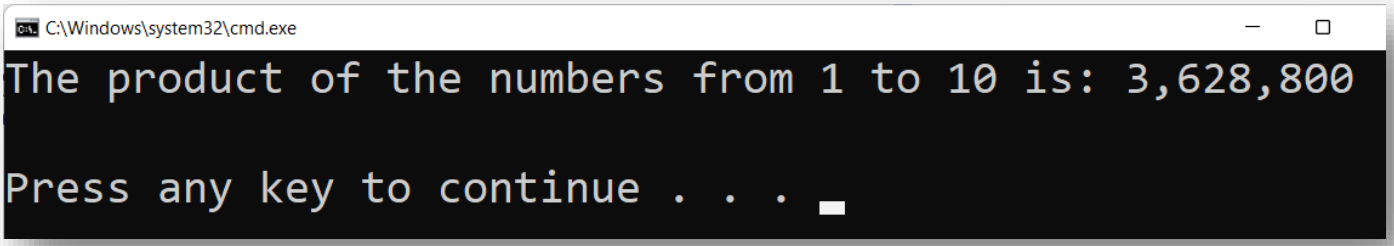
Exercise 4

Write a program called *SumTo100* that calculates the sum of the numbers from 1 to 100.



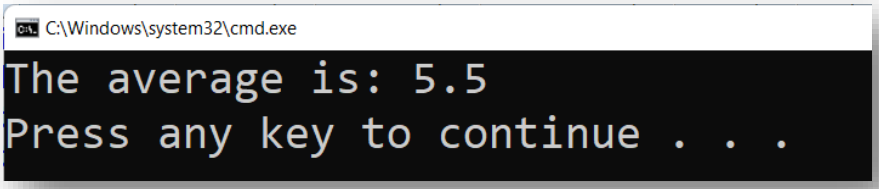
Exercise 5

Write a program called *ProductTo10* that calculates the product of the numbers from 1 to 10.



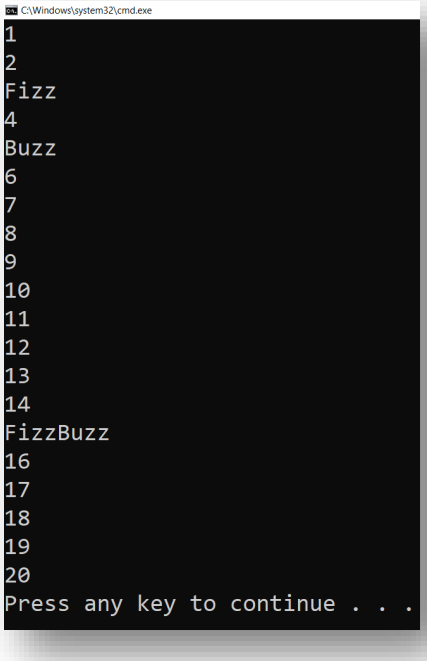
Exercise 6

Write a program that calculates the average of the numbers from 1 to 10.



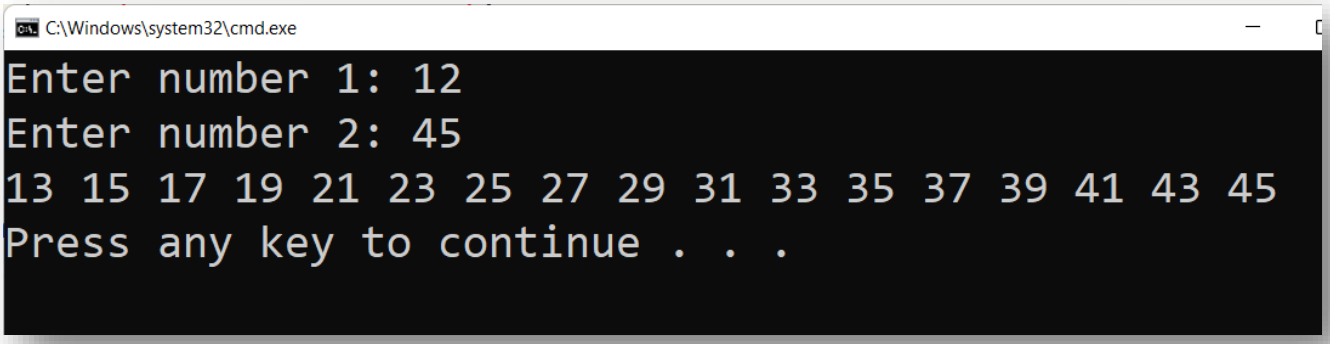
Exercise 7

Print the numbers 1 through 20, but print "Fizz" instead of 3, "Buzz" instead of 5, and "FizzBuzz" instead of 15.



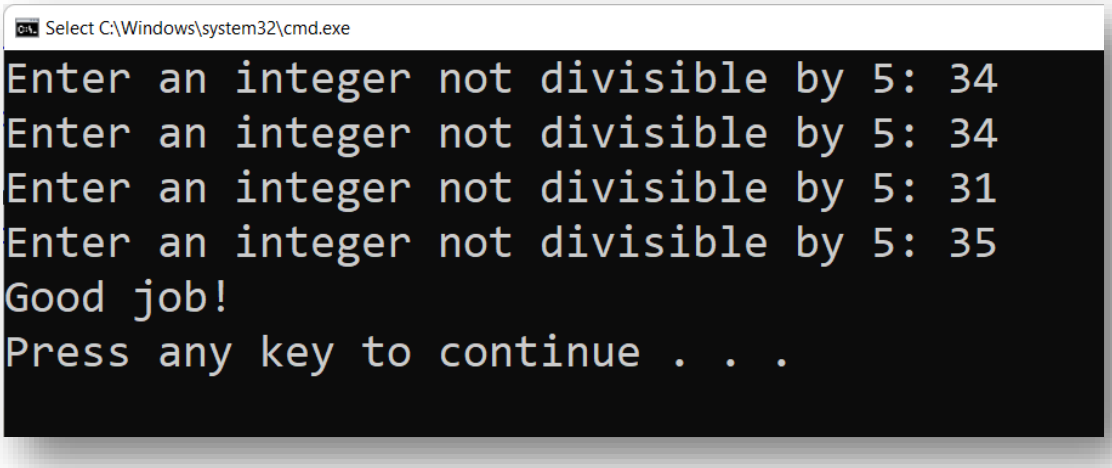
Exercise 8

Write a program called *PrintOddRange* that asks the user to enter two numbers and then prints all the odd numbers between those two numbers.



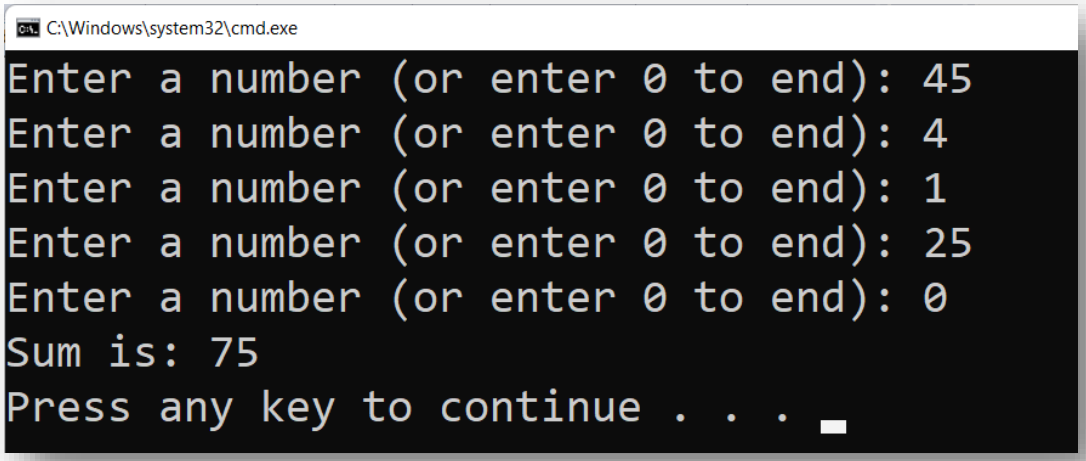
Exercise 9

Write a program in java called *DivBy5* that keeps asking the user to enter a number not divisible by 5. The program ends once a number that is divisible by 5 is entered.



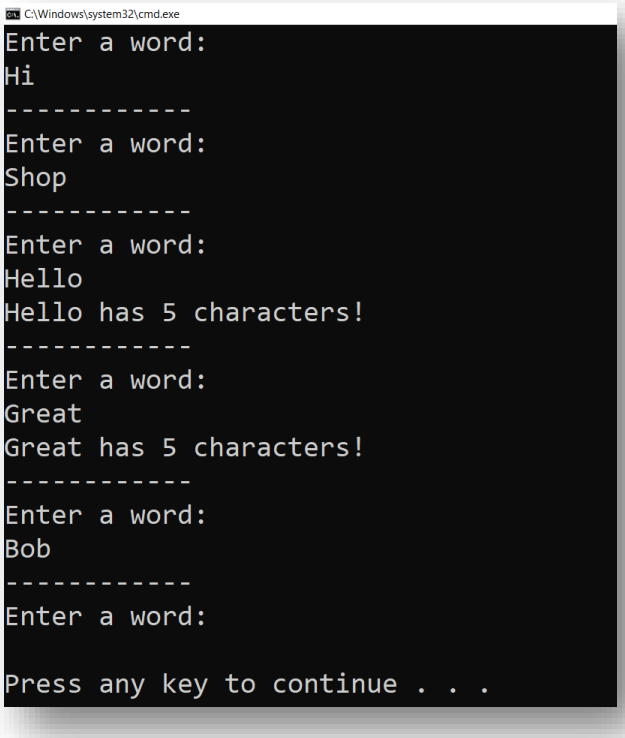
Exercise 10

Write a program called *IntegerAdd* using a while loop that asks the user to enter a positive integer, and then keeps asking for a positive integer until the user enters a zero. At that point, the program should print out the sum of all the numbers entered.



Exercise 11

Write a program called *StringLengthCalc* using a while loop that allows the user to enter words. If the word is exactly 5 characters long, a message is output to the console (see below), otherwise, the user is prompted to enter another word. To end the loop, the user enters and empty string (press return). *Hint: word.length() will calculate the numbers of letters in a String.*



Exercise 12

Write a program called *MeaningOfLife* using a while loop that that keeps asking the user to enter a number until they enter the number 42. If the number is higher or lower than 42, an appropriate message is displayed.