Assignment – 4

Q1: Write a python program to add all the odd numbers from 0 to 20.

Q2: Write a python program to add all the even numbers between 0 to 20.

Q3: Write a python program to find the sum of all integers greater than 100 and less than 200.

Q4: Write a python program to display a Multiplication table of a number enter from keyboard.

Q5: Write a program to display the sum of square of the first ten even natural numbers

// (2\*2+ 4\*4 + 6\*6 + 8\*8 + 10\*10 + 12\*12 + 14 \* 14 + 16 \* 16 + 18\*18 + 20\*20)

Q6: Write a program to display the sum of cube of first ten even natural numbers

// (2\*2\*2+ 4\*4\*4 + 6\*6\*6 + 8\*8\*8 + 10\*10\*10 + 12\*12\*12 + 14 \* 14 \* 14 + 16 \* 16 \*16 + 18\*18\*18 + 20\*20\*20)

Q7: Display the sum of: 1 + 1/4 + 1/7 + 1/10 + 1/13 + 1/16 + 1/19 + 1/22 + 1/25

Q8: Write a python program to display ascii characters from 65 to 90

Q9: Display ascii characters from 48 to 57.

Q10: Display the following output with the help of Ascii character.

Q11: write a python program to swap two variables provided by the user.

Q12: The marks obtained by a student in 5 different Subjects are input through a keyboard. The Student gets a division as per the following rules.

1. Percentage above or equal to 60 – First Division

2. Percentage between 50 and 59 – Second Division

3. Percentage between 40 and 49 – Third Division

4. Percentage less than 40 – Fail

Write a python program to Display the result based on the above Criteria.

Q13: write a Python program to find the largest number among the three input numbers

Q14: write a Python program to find the factorial of a number provided by the user

Q15: write a Python program to check if the input number is prime or not.

Q16. With a given integral number n, write a program to generate a dictionary that contains (i, i\*i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary.

Suppose the following input is supplied to the program:

8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

Q17. Write a program which takes 2 digits, X,Y as input and generates a 2-dimensional array. The element value in the i-th row and j-th column of the array should be i\*j.

Note: i=0,1.., X-1; j=0,1,¡­Y-1.

Example

Suppose the following inputs are given to the program:

3,5

Then, the output of the program should be:

[[0, 0, 0, 0, 0], [0, 1, 2, 3, 4], [0, 2, 4, 6, 8]]

Q18. Write a program that accepts a sequence of whitespace separated words as input and prints the words after removing all duplicate words and sorting them alphanumerically.

Suppose the following input is supplied to the program:

hello world and practice makes perfect and hello world again

Then, the output should be:

again and hello makes perfect practice world

Q19. Use a list comprehension to square each odd number in a list. The list is input by a sequence of comma-separated numbers.

Suppose the following input is supplied to the program:

1,2,3,4,5,6,7,8,9

Then, the output should be:

1,3,5,7,9

Q20. Write a program to compute the frequency of the words from the input. The output should output after sorting the key alphanumerically.

Suppose the following input is supplied to the program:

New to Python or choosing between Python 2 and Python 3? Read Python 2 or Python 3.

Then, the output should be:

2:2

3.:1

3?:1

New:1

Python:5

Read:1

and:1

between:1

choosing:1

or:2

to:1

Q21. Define a function that can accept two strings as input and print the string with maximum length in console. If two strings have the same length, then the function should print al l strings line by line.

Q22. Write a program to generate and print another tuple whose values are even numbers in the given tuple (1,2,3,4,5,6,7,8,9,10).

Q23. Write a program which can filter even numbers in a list by using filter function. The list is: [1,2,3,4,5,6,7,8,9,10].

Q24. Write a program which can map() to make a list whose elements are square of elements in [1,2,3,4,5,6,7,8,9,10].

Q25. Write a program which can map() and filter() to make a list whose elements are square of even number in [1,2,3,4,5,6,7,8,9,10].

Q26. Write a program which can filter() to make a list whose elements are even number between 1 and 20 (both included).