#### First Network Programming Homework

### **Question 1: Python Basics?**

**A-**Define a list that contain the names of graduated students" 5 students at least": Create a program that accept student name and prints if the user is graduated or not.

```
I-A.py - C:\Users\ASUS\Desktop\1-A.py (3.7.2)

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grad=['nawar', 'ali', 'hasan', 'bashar', 'natali', 'samar']
s=input('enter student name:\t ')
if s in grad:
    print("graduated")
else:
    print("not graduated")
```

```
훩 Python 3.7.2 Shell
                                                                        File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 23:09:28) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
========= RESTART: C:\Users\ASUS\Desktop\1-A.py =============
enter student name:
                      nawar
graduated
>>>
>>> eman
Traceback (most recent call last):
 File "<pyshell#1>", line 1, in <module>
NameError: name 'eman' is not defined
>>>
```

### B- Generate and print a list of odd numbers from 1 to 1000.

```
I-B.py - C:\Users\ASUS\Desktop\1-B.py (3.7.2)

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d=[x for x in range(1,1001) if x%2!=0]

print(d)
```

```
Python 3.7.2 Shell
                                                                                                                        File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 23:09:28) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
                    ====== RESTART: C:\Users\ASUS\Desktop\1-B.py ==
[1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81,
83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117,
 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213,
 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309,
 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341,
 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405,
 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437,
 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469, 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501, 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533,
 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565,
 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597,
 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629,
 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661,
 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725, 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757,
 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789, 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821, 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853,
 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885,
 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949,
 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981,
 983, 985, 987, 989, 991, 993, 995, 997, 999]
>>>
```

**C**- L=['Network', 'Math', 'Programming', 'Physics', 'Music'] In this exercise, you will implement a Python program that reads the items of the previous list and identifies the items that starts with 'P' letter, then print it on screen.

```
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1=['Network','Math','Programming','Physics','Music']

for i in range(0,len(1)):
    if 1[i][0]=='P':
        print(1[i])
```

# **D**: Using Dictionary comprehension, Generate this dictionary d={1:1,2:4,3:9,4:16,5:25,6:36,7:42,8:64,9:81,10:100}

```
I-D.py - C:\Users\ASUS\Desktop\1-D.py (3.7.2)

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d={x:x**2 for x in range(1,11)}

print(d)
```

### Question 2: Convert from decimal to binary

Write a Python program that converts a decimal number into its equivalent binary number.

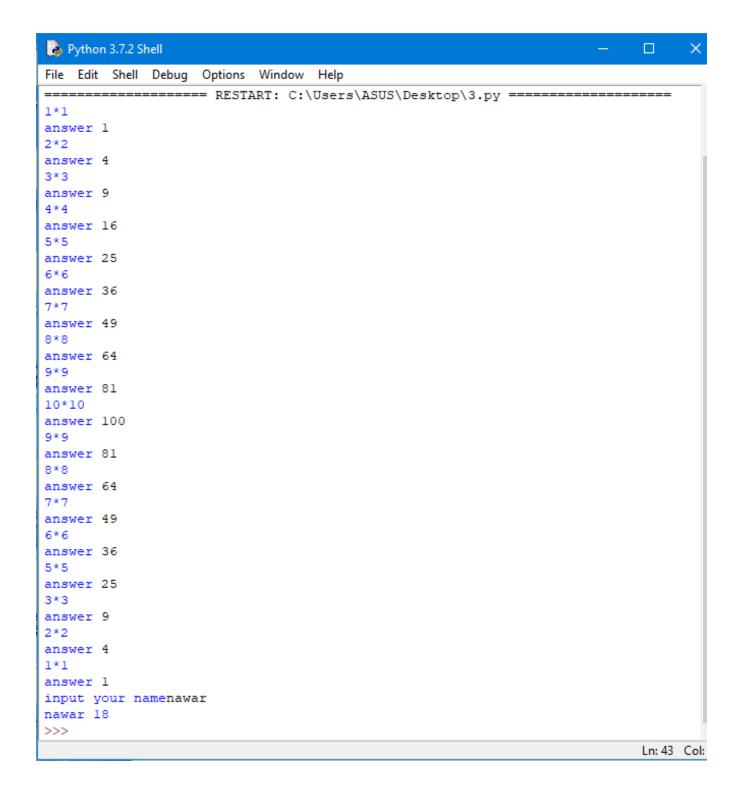
```
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dnum=int(input('enter decimal number'))
bnum=list()
while dnum!=0:
    t=dnum%2
    dnum//=2
    bnum.append(t)
bnum.reverse()
for i in bnum:
    print(i,end="")
```

## Question 3: Working with Files" Quiz Program"

Type python quiz program that takes a text or json or csv file as input for (20 (Questions, Answers)). It asks the questions and finally computes and prints user results and store user name and result in separate file.

```
3.py - C:\Users\ASUS\Desktop\3.py (3.7.2)
                                                                               File Edit Format Run Options Window Help
n def extractfield(filename,n):
      infile=open(filename, "r")
      return [line.rstrip().split(',')[n-1] for line in infile]
 count=0
 infile=open("questions.csv",'r')
 outfile=open("mark.csv", "w")
n questions=extractfield("questions.csv",1)
 answers=extractfield("questions.csv",2)
 for i in range(len(questions)):
     print(questions[i])
      answer=input('answer')
     if answer==answers[i]:
          count+=1
 name=input("input your name")
  count=str(count)
 print (name, count)
 outfile.write(name+count)
 outfile.close()
```



4	Α	В	С	D
1	1*1,1			
2	2*2,4			
3	3*3,9			
4	4*4,16			
5	5*5,25			
6	6*6,36			
7	7*7,49			
8	8*8,64			
9	9*9,81			
10	10*10,100			
11	9*9,81			
12	8*8,64			
13	7*7,49			
14	6*6,36			
15	5*5,25			
16	3*3,9			
17	2*2,4			
18	1*1,1			
19				
20				
21				
22				
23				
24				
questions +				
100	% +	$\overline{}$	— <b>-</b> 四	

4	Α	В		
1	nawar18			
2				
3				
2 3 4 5				
5				
6				
7				
8				
9				
10				
11				
12				
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14				
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	<b>←</b> →	mark		
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