Syrian Arab Republic

Lattakia - Tishreen University

Department of Communication and electrical engineering

5th , Network Programming : Homework No1

الجمهورية العربية السورية

اللاذقية -جامعـــة تشريـــن

كلية الهندسة الكهربائية والميكانيكية

قسم هندسة الاتصالات والالكترونيات

السنة الخامسة: وظيفة1 برمجة شبكات

# ريم وفيق أحمد 1475

السؤال الأول:

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.*

```
garduatedstudents=['reem','tala','wafeek','ahmad','mohmmed']
sname=input('enter student name: ')
if sname in garduatedstudents:
    print(sname,'is graduated.')
else:
    print(sname,'is not graduated.')
```

الخرج

```
enter student name: reem
reem is graduated.
>>>
```

B_ *Generate and print a list of odd numbers from 1 to 1000.*

```
File  Edit  Format  Run  Options  Window  Help
odds=[x for x in range(1,1001) if x%2!=0]
print(odds)
```

ألخرج

```
[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.*

```
l=['Network','Math','Programming','Physics','Music']
for i in range(len(l)):
    if l[i][0]=='P':
        print(l[i])
```

الخرج

```
Programming
Physics
>>>
```

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}*

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

ألخرج

```
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}
>>>
```

السؤال الثاني:

*Convert from decimal to binary*

*Write a Python program that converts a decimal number into its equivalent binary number. The program should start reading the decimal number from the user. Then the binary equivalent number must be calculated. Finally, the program must display the equivalent binary number on the screen.*

```
s=int(input('enter decimal number '))
result=[]
while s>0:
    result.append(str(s%2))
    s//=2
result.reverse()
print("".join(result))
```

الخرج

```
enter decimal number 6
110
>>>
```

السؤال الثالث:

*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.*

File Edit Format Run Options Window Help

```
import json
infile='1.json'
infile=open(infile,'r')
num=0
u=input('enter your name: ')
d=dict()
dic=json.load(infile)
infile.close()
for k,v in dic.items():
    print(k)
    a=input()
    if a == v:
        num+=1
        d[k]=v
d[u]=num
print(d)
outfile='2.json'
outfile=open(outfile,'w')
json.dump(d,outfile)
outfile.close()
```

ألخرج

```
enter your name: reem
1+1
2
2+2
4
3+3
1
4+4
2
5+5
1
6+6
2
7+7
1
{'1+1': '2', '2+2': '4', 'reem': 2}
>>>
```

2.json - Notepad

File Edit Format View Help

{"1+1": "2", "2+2": "4", "reem": 2}