

A-

```
#A
students=['ghasaq','abdullah','asef','eman','yara']
name=input('input a student name:')
if name in students:
    print("student is graduated")
else:
    print("student is not graduated")
```

out:

input a student name:ghasaq

student is graduated

Process finished with exit code 0

B-

```
odds=[x for x in range(1,1000) if x%2!=0]
print(odds)
```

out:

```
[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]
```

Process finished with exit code 0

C-

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

out:

Programming

Physics

Process finished with exit code 0

D-

```
#question1 D
d={x:x**2 for x in range(1,11)}
print(d)
```

out:

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

Process finished with exit code 0

2-

```
#2
decimal=int(input('enter a decimal number'))
binary=[]
while True:
    binary.append(str(decimal%2))
    decimal//=2
    if decimal==0:
        break
binary.reverse()
print(''.join(binary))
```

out:

enter a decimal number19

10011

Process finished with exit code 0

3-

```
#3
filename="t.txt"
infile=open(filename,'r')
s=infile.read()
l=s.splitlines()
infile.close()
count=0
for i in l:
    print(i[:-1])
    s=input()
    if s==i[:-1]:
        count+=1
username=input("enter your name ")
count=str(count)
sw=username+" "+count
print(sw)
out=open("ghasaq.txt",'w')
out.write(sw)
out.close()
```

file:

```
len("program")=7
len("hi")=2
len([1,2,2])=3
len((1,2))=2
3**2=9
1+1=2
2+2=4
2-1=1
0+0=0
4+2=6
2+6=8
```

out:

len("program")=

7

len("hi")=

2

len([1,2,2])=

3

len((1,2))=

2

3\*\*2=

9

1+1=

2

2+2=

4

2-1=

1

0+0=

1

4+2=

3

2+6=

8

enter your name ghasaq

ghasaq 9

Process finished with exit code 0