Dilip had joined as intern data science firm. He is working in pathology department of a medical college. He got a task to collect MRI scans of patients. These MRI scans are matrix of grayscale.

Sugar levels of patient recorded are as follows:

11	13.8	23	22	45.9	2.3	56.3	23.4	24	13

Each value above represents sugar level of a different individual participated in study.

Help her by writing code in *python* for her:

a. Import numpy
b. Create array of above `glucose` data in numpy. This should be numpy array.
c. What will be dimension of the numpy array created above.
d. Print no. of values in `glucose` array you create in part (b).
e. Add a new reading of `14.6` at end of `glucose`
f. Remove reading `13.8`
g. Remove reading at index `2`
h. Dilip receives information about 2 more individuals which was missed earlier. He want to store in list `g2 = [4.3, 2.5]`
i. Merge this `g2` with `glucose` to make one single list.
j. Display element on index `2, 3` and `4` of `glucose` list.
k. Print last element.
l. Print first five elements
m. Print elements at even position
n. Replace value at index 5 to 78.5

Create a 2-dimensional array of 1024 columns and 728 rows with values between 0 to 255.

```
my_img  = np.random.randint(low = 0,high = 255, size = (728,1024))
import matplotlib.pyplot as plt
from PIL import Image


plt.imshow(my_img, cmap = 'gray', vmin=0, vmax=255)
plt.show()
```

Answer the following w.r.t. numpy

1. Create a 2D array with values:

11	12	13
21	22	23

2. Create 2x2 array of zeros
3. Create 2x20 array filled with 25
4. Create a identity array of 6x6
5. Reshape this array in 3 rows.
6. Create 1x7 array of ones
7. Create a 2D array with 2 rows having values from 0,1,2,3, … 13. Generate number series using arrange function
8. What is use of flatten function
9. Create the following array
   [[11 12 13 14]
   [21 22 23 24]
   [31 32 33 34]]
10. Display first 2 rows x 2 columns of above created array
11. Display only values in above created array that are above 15.
12. What is dtype function?
13. Create array [11, 21] with datatype int64
14. create a 10 element array of randoms