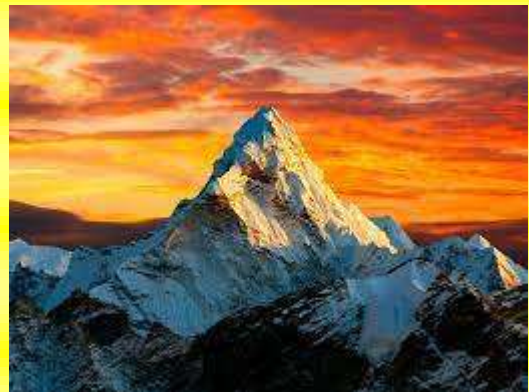# JOY OF CODING

Day 3

Q 1.

Fig. a

Fig. b

Baby Sanvi is not comfortable viewing the image as shown in Fig. a, in her computer/tab. She wants a better viewing experience as shown in Fig. b. Write a program that keeps Sanvi comfortable and happy.

(Hint. Image is represented as matrix; The input is a matrix, and the output is a matrix as well.)

Caution: It's **not** transpose!!!

Q 2. Consider the following sequence of balloons (array)

Given an array (as shown) and a positive integer say 19, write a C program that prints the sub array and the range of indices whose sum is equal to 19. In this case the sub array is [4,9,6] and the indices range from 2 to 4.

Test case 1

I/p

[5, 4, 7, 3, 9, 2]

Sum=23

O/p

the sub array is [4,7,3,9]

Indices range from 1 to 4

Test case 2

I/p

[1, 7, 3, 8, 5, 9, 6, 2]

Sum=9

O/p

the sub array is [9]

Indices range from 5 to 5

Test case 3

I/p

[1, 7, 3, 8, 5, 9, 6, 2]

Sum = 48

O/p

Not possible to obtain the sum

Q 3. Debug the following code

(a).

```
int main()
{
    int arr[5]={11,22,33,44,55}
    int *ptr=malloc(5*sizeof(int);
    //array copy operation  , the contents of arr should be copied with contents of ptr
    for (int i=0;i>5;i++)
        *arr+i = *ptr+i;
    return 0;
}
```

(b).

```
int main ()
{
    typedef struct details
    {
        int age;
        float sal;
        char name[ ];
    } emp;

emp e, eptr=&e;
eptr.age =21;
eptr.sal=24.5;
eptr.name="Washington";
return 0;
}
```