Brute:

def alternateNumbers(a : List[int]) -> List[int]:

    neg=[]

    pos=[]

    for i in a:

        if i<0:

            neg.append(i)

        else:

            pos.append(i)

    k,j=0,0

    for i in range(len(a)):

        if i%2==0:

            a[i]=pos[k]

            k+=1

        else:

            a[i]=neg[j]

            j+=1

    return a

Optimal:

def alternateNumbers(a : List[int]) -> List[int]:

    pos,neg=0,1

    ans=[0]\*len(a)

    for i in a:

        if i>0:

            ans[pos]=i

            pos+=2

        elif i<0:

           ans[neg]=i

           neg+=2

    return ans

Variety when positive not equal to number of negatives

class Solution:

def rearrange(self,arr, n):

p=[]

ne=[]

for i in arr:

if i<0:

ne.append(i)

else:

p.append(i)

j,k,i=0,0,0

while(j<len(p) and k<len(ne)):

arr[i]=p[j]

j=j+1

i+=1

arr[i]=ne[k]

i+=1

k+=1

while(j<len(p)):

arr[i]=p[j]

i+=1

j+=1

while(k<len(ne)):

arr[i]=ne[k]

i+=1

k+=1

return arr