

EXERCISE

Write a program for a post-pandemic movie outing. First, the program asks the user to introduce how many people need tickets to watch a movie. The program will then ask every person that needs a ticket which movie they would like to watch: A) Avatar 2, or B) The Batman. Furthermore, the program will ask each person whether they want to order popcorn and if yes, whether they have a free popcorn voucher. At the end, the program displays the movie choice for each person. Finally, the program will also calculate the total amount to be paid, which will be the price of a ticket (9 euros) for each person, as well as an additional 6 euros for each person that wants popcorn and does not have a free popcorn voucher.

Extra points: Make sure the user introduces a number of people who need a ticket greater than 0. If this is not the case, the program will ask again until a number greater than 0 is introduced.

Example of execution:

```
How many people need a ticket to watch a movie? 5
Person 1
Movie choice (A/B): A
Do you want popcorn? (Y/N): Y
Do you have a free popcorn voucher? (Y/N): N
Person 2
Movie choice (A/B): B
Do you want popcorn? (Y/N): Y
Do you have a free popcorn voucher? (Y/N): Y
Person 3
Movie choice (A/B): A
Do you want popcorn? (Y/N): N
Person 4
Movie choice (A/B): A
Do you want popcorn? (Y/N): N
Person 5
Movie choice (A/B): B
Do you want popcorn? (Y/N): Y
Do you have a free popcorn voucher? (Y/N): N
The list of movies that were chosen is:
A B A A B
You have to pay 57 euros.
```

SOLUTION

```
clear;
groupPeople = 0;
countPopcorn = 0;

while(groupPeople <= 0)
    groupPeople = input('How many people need a ticket to watch a
movie? ');
end

vector = zeros(1, groupPeople);

for i = 1:groupPeople
    fprintf('Person %d\n', i);
    movieChoice = input('Movie choice (A/B): ', 's');
    vector(i) = movieChoice;
    popcorn = input('Do you want popcorn? (Y/N): ', 's');
    if(popcorn == 'Y')
        voucher = input('Do you have a free popcorn voucher? (Y/N):
', 's');
        if(voucher == 'N')
            countPopcorn = countPopcorn + 1;
        end
    end
end

disp('The list of movies that were chosen is: ');
for i = vector
    fprintf('%c ', i);
end
toPay = (groupPeople * 9) + (countPopcorn * 6);
fprintf('\nYou have to pay %d euros\n', toPay);
```