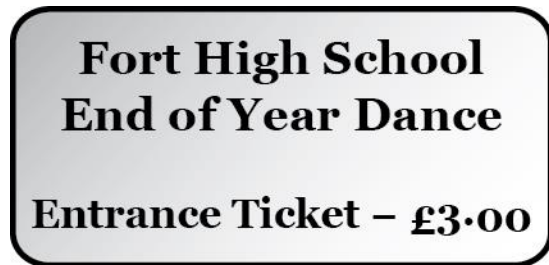


Part 2

Pupils attending the dance must book a table as part of a group. Groups can have a minimum of 4 and a maximum of 10 pupils. Pupils can buy either an entrance ticket (£3.00) or a ticket that allows entrance and a photo (£4.99).



Your task is to write a program that will enable the Computing class to calculate the ticket cost for each pupil attending the dance and display individual costs for the group.

The program requires the following inputs:

- The name of the group
- A valid number of pupils in the group
- The name of each pupil in the group
- Yes or No to ordering a photo

The output from the program should display:

- The name of the group
- The number of pupils in the group
- The name of each pupil in the group
- The total cost of the ticket **per pupil (all totals should be displayed to two decimal places).**

An example of the output is provided below:

| | |
|------------------|--------------|
| Group Name: | S5 Film Club |
| Number in group: | 5 |
| Kyra Walker | 4.99 |
| Gillian Burg | 3.00 |
| Matt Fisher | 4.99 |
| Iman Aktar | 4.99 |
| Scott Adkins | 3.00 |

Your task is to create software for the project.

The top level algorithm is shown below. Step 5 has been refined for you.

Pseudocode

MAIN STEPS

1. Get group name
2. Get a valid number of pupils in the group
3. Loop for each pupil in the group
4. Get pupil name
5. Decide and store ticket cost for each pupil
6. End loop
7. Display results

REFINEMENTS

Step 5

5. Decide and store ticket cost for each pupil
 - 5.1 Ask if pupil wants to pre-order a photo
 - 5.2 If yes then
 - 5.3 ticket price = 4.99
 - 5.4 Else
 - 5.5 ticket price = 3.00
 - 5.6 End If

| Tasks | | Evidence required | | | | | | | | | | | | | | | | |
|-------------------------------|---|------------------------------|--------------|-------------------------------|---|------------|------------------|-------------|-----|--------------|----|-------------|-----|------------|-----|--------------|----|----------------|
| 1 | Refine the following parts of the algorithm: <ul style="list-style-type: none"> • Get a valid number of pupils in each group (step 2) • Display results (step 7). (NOTE: <i>all refinements must include an algorithm and not simply use a feature of an event-driven language.</i>) | Pseudocode for steps 2 and 7 | | | | | | | | | | | | | | | | |
| 2 | Create a program that matches the refined algorithm. | Listing of program | | | | | | | | | | | | | | | | |
| 3 | Test your program using the data below: <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Group Name</th> <th>S5 Film Club</th> </tr> </thead> <tbody> <tr> <td>Number of people in the group</td> <td>5</td> </tr> <tr> <td>Pupil Name</td> <td>Pre-Order Photo?</td> </tr> <tr> <td>Kyra Walker</td> <td>Yes</td> </tr> <tr> <td>Gillian Burg</td> <td>No</td> </tr> <tr> <td>Matt Fisher</td> <td>Yes</td> </tr> <tr> <td>Iman Aktar</td> <td>Yes</td> </tr> <tr> <td>Scott Adkins</td> <td>No</td> </tr> </tbody> </table> | Group Name | S5 Film Club | Number of people in the group | 5 | Pupil Name | Pre-Order Photo? | Kyra Walker | Yes | Gillian Burg | No | Matt Fisher | Yes | Iman Aktar | Yes | Scott Adkins | No | Printed output |
| Group Name | S5 Film Club | | | | | | | | | | | | | | | | | |
| Number of people in the group | 5 | | | | | | | | | | | | | | | | | |
| Pupil Name | Pre-Order Photo? | | | | | | | | | | | | | | | | | |
| Kyra Walker | Yes | | | | | | | | | | | | | | | | | |
| Gillian Burg | No | | | | | | | | | | | | | | | | | |
| Matt Fisher | Yes | | | | | | | | | | | | | | | | | |
| Iman Aktar | Yes | | | | | | | | | | | | | | | | | |
| Scott Adkins | No | | | | | | | | | | | | | | | | | |
| 4 | Test your program using an exceptional number of people in a group. | Screenshots | | | | | | | | | | | | | | | | |

END OF COURSEWORK TASK