The one with the travel company

Due 30 Sep by 23:59 **Points** 1 **Submitting** an external tool **Available** until 30 Sep at 23:59

Successfully solving this problem will award the student **1 point** towards Examination 1

Requirements

- The script must pass all the automatic tests
- The script must pass a manual inspection
- The student must write the script on his or her own, any suspicion about cheating, cooperation, and/or plagiarism will be reported to the Discipline Board (see the <u>Study</u> <u>Guide</u> <u>↓</u> (https://hkr.instructure.com/courses/5190/files/1027789/download?download_frd=1) for more information). The students script will be checked both manually and using antiplagiarism software

Instructions

- 1. Analyse the problem below using <u>Polya's Problem solving Technique</u> (https://math.berkeley.edu/~gmelvin/polya.pdf)
- 2. Create a script named **Lab1_1.py** that solves the problem according to the given instructions
- 3. Pay special attention when formatting the output as it must match the specified format **exactly** (character by character) to pass the tests
- 4. Upload the script using the link below

Task description

A travel company needs you to develop a script that can help them decide the price of their tickets. The company want the script to work in accordance with the following three steps:

Chose a ticket type

The first thing the user of the script shall do is to select a ticket type using a menu looking like this:

```
Ticket types:
1. Budget ( 500kr)
2. Economy ( 750kr)
3. VIP (2000kr)
```

Menu for optional purchases

Next, the user shall be presented with a menu where he or she can select what to include in the ticket. The user shall be able to add a bag (max 1) or a meal (max 1). The user shall also be able to remove already added bags or meals. Finally the user shall be able to finalize the ticket. Above the menu the script shall also display if a bag and/or meal has been selected. The company wants the menu to look like this:

```
Currently you have:
    0 bag(s) registered
    0 meal(s) registered

Here are your options:

1. Add bag (max 1)

2. Add meal (max 1)

3. Remove bag

4. Remove meal

5. Finalize ticket
```

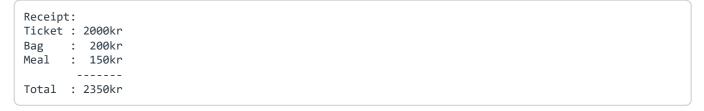
Finalizing the ticket

When the user selects to finalize the ticket the script shall calculate the price of the ticket and any optional purchases according to the following price list:

- Budget ticket = 500kr
- Economy ticket = 750kr
- VIP = 2000kr
- Bag included = 200kr
- Meal included = 150kr

The travel company insists that the last output shall look like an actual receipt and they require it to formatted **exactly** as can be seen in the examples below. The Bag and/or Meal parts of the receipt shall only show up if they have been selected.

Example of a receipt with a VIP ticket, a bag, and a meal:



Example of a receipt with only a Budget ticket:

```
Receipt:
Ticket: 500kr
-----
Total: 500kr
```

Comments and additional resources

- Students are highly recommended to first solve all the tasks from the corresponding lectures
 and exercises before attempting to solve this problem. Having a solid plan before starting to
 code will also help
- The student can upload as many times as he or she likes to before the deadline
- When placing a menu inside a loop like in this case, do not forget to add an option to exit the loop
- Using one variable for each of the things we want to remember might be a good approach
- This <u>video</u> <u>(https://youtu.be/IYR8RAT3af4)</u> recorded while running the finished script showcases how the script shall look and work when finished

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