

SE 1105 PROGRAMMING AND PROBLEM SOLVING I

Section 4-5-6

WEEK 5 27.10.2025

Task 1: The Ice-Cream Robot

- You are writing the brain of a small ice-cream robot that works at the campus café. A customer can order only **ONE** scoop. The robot must decide the price, extras and the correct cone.
- Rules:
 - flavour code 1 → Chocolate, 15 TL
 - flavour code 2 → Strawberry, 12 TL
 - flavour code 3 → Vanilla, 10 TL
 - ANY other number → “Sorry, we don’t have that flavour.” (price 0)
- The robot must also choose the cone:
 - Chocolate gets a waffle cone
 - All other valid flavours get a sugar cone
 - Invalid flavour → no cone at all.
- If the customer wants chocolate or hazelnut pieces top of the icecream, you should increase the price as:
 - Extras code 1 → Chocolate, 1TL
 - Extras code 2 → Hazelnut pieces, 2 TL
 - Extras code 3 → Don’t want any extras, 0 TL
- Examples(What you should see in the console):
 - What flavour do you want your icecream?
(1=Choc 2=Straw 3=Van): 2
Do you want any extras?
(1=choc 2=nuts 3=no extras): 1
Sugar cone, chocolate, please pay 13 TL
 - What flavour do you want your icecream?
(1=Choc 2=Straw 3=Van): 9
Do you want any extras?
(1=choc 2=nuts 3=no extras): 3
Sorry, we don't have that flavour.
- Create a function named “icecream_robot” that takes int flavour, and int extras as **parameters** and **returns** the price.
- Inside main, get the flavour and extras choice **from the user** and **call** the “icecream_robot” function. Then **print the final price** to the screen.

Task 2: The Taxi-Meter

- You just wrote the brain of the campus taxi. The driver only needs to type two integers:
 - distance travelled in km (whole number)
 - daytime or night-time ride → enter 1 for day, 2 for night
- Pricing rules:
 - First 5 km (inclusive): 12 TL per km
 - After 5 km: 9 TL per km
 - Night surcharge: +20 % on the whole trip
 - The meter prints the exact fare with two decimal digits
- Examples(What you should see in the console):
 - Enter km: 8
Enter 1=day 2=night: 1
Total fare: 77.00 TL
 - Enter km: 8
Enter 1=day 2=night: 2
Total fare = 92.40 TL
- Write a function named “fare” that takes int km, and int period as parameters and returns the fare.
- Inside main, get the km and period **from the user** and **call** the “fare” function. Then **print the final fare** to the screen.