

## GTS123 Lab Midterm Quiz 1/2023

## Q1

Write a Python program estimates the finish time for a runner based on their running pace and selected race distance. Additionally, it determines if the estimated finish time is within the cutoff time for the chosen distance.

Option	Name of Race	Distance	Cutoff Time
a	Mini-marathon	10 kilometers	2.5 hours
b	Half-marathon	21.0975 kilometers	4.0 hours
c	Full-marathon	42.195 kilometers	6.0 hours

*For example: Running pace 5:30 is in the format (minutes:seconds)*

**Example 1** (user inputs are in *italics*)

```
Enter your running pace (minutes per kilometer): 6:45
Enter your distance (a) Mini-marathon, (b) Half-marathon, (c) Full-marathon: A
Your estimated finish time is 1 hours 7 minutes
You can finish in cutoff time (Your cutoff time is 2.50 hours).
```

**Example 2** (user inputs are in *italics*)

```
Enter your running pace (minutes per kilometer): 5:30
Enter your distance (a) Mini-marathon, (b) Half-marathon, (c) Full-marathon: b
Your estimated finish time is 1 hours 56 minutes
You can finish in cutoff time (Your cutoff time is 4.00 hours).
```

**Example 3** (user inputs are in *italics*)

```
Enter your running pace (minutes per kilometer): 7:30
Enter your distance (a) Mini-marathon, (b) Half-marathon, (c) Full-marathon: C
Your estimated finish time is 5 hours 16 minutes
You can finish in cutoff time (Your cutoff time is 6.00 hours).
```

**Example 4** (user inputs are in *italics*)

```
Enter your running pace (minutes per kilometer): 10:30
Enter your distance (a) Mini-marathon, (b) Half-marathon, (c) Full-marathon: c
Your estimated finish time is 7 hours 23 minutes
You cannot finish in cutoff time (Your cutoff time is 6.00 hours).
```

**Example 5** (user inputs are in *italics*)

```
Enter your running pace (minutes per kilometer): 5:30
Enter your distance (a) Mini-marathon, (b) Half-marathon, (c) Full-marathon: e
Invalid distance selection
```