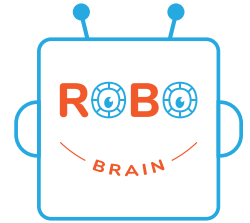


# Homework – Task 1



- What is your response time?
- Design a python program to test your response time
  - As long as you see the message, press enter
  - Use the time module to record the start time and end time
  - Calculate the time period between the start and end time
  - That is your response time.
- Hint: in the input() function, if you press enter, then your input string is empty.

```
from [REDACTED] import [REDACTED]
```

```
start = [REDACTED]
```

```
prompt = input("Press enter key:")
```

```
end = [REDACTED]
```

```
if prompt == "" :
```

```
    print("Your response time is", [REDACTED], "seconds.")
```

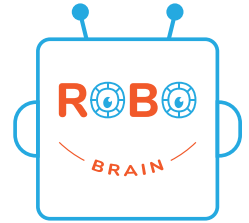
```
else:
```

```
    print("Oops, press enter only.")
```



**Response  
Time  
Testing**

# Task 2



- Think about whether you can improve the above code by add a while-loop
  - This while-loop should enable users to play again and again until they want to stop
  - Report the fastest response time among all the trials
- **Ms Han's fastest response time is 0.09955120086669922.**
  - Can you beat her?

```
from time import *
```

```
minResponseTime = 10000
```

```
play = input("Wanna play (Y/N)? ")
```

```
while play == "Y" or play == "y":
```

```
    start = time()
```

```
    prompt = input("Press enter key:")
```

```
    end = time()
```

```
    responseTime = 
```

```
    if prompt == "" :
```

```
        print("Your response time is", responseTime, "seconds.")
```

```
        if 
```

```
            minResponseTime = responseTime
```

```
    else:
```

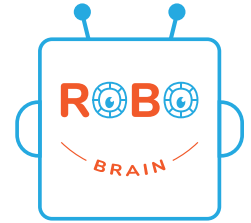
```
        print("Oops, press enter only.")
```

```
    play = input("Wanna play again (Y/N)? ")
```

```
print("Your fastest response time is", minResponseTime)
```



# Task 3



## • Guess the time elapsed

- The computer is going to display a message in a random period of time (1-10 seconds)
  - Time is assumed to be integer only
- The message is chosen by you
- You are supposed to guess the time elapsed
- The program will tell you the actual time and your guess
- You may modify the `progressBar()` function defined in the class to be `delayedOutput()`
  - It will take the whole message secs seconds to display.
  - So the time interval between each letter in the message is  $\text{secs}/(\text{len}(\text{message}) - 1)$

```
import ██████████
from random import ██████████

def delayedOutput(secs, message):
    messageLen = len(message)
    for i in range(messageLen):
        print(message[i], end='', flush=True)
        time.sleep(secs / (len(message) - 1))
```



```
timeElapsed = ██████████
message = input("Enter your message to be displayed:")
delayedOutput(██████████, ██████████)

guess = int(input("Enter the time you guess:"))

print("The real time elapsed is", timeElapsed)
print("Your guess is", guess)
```