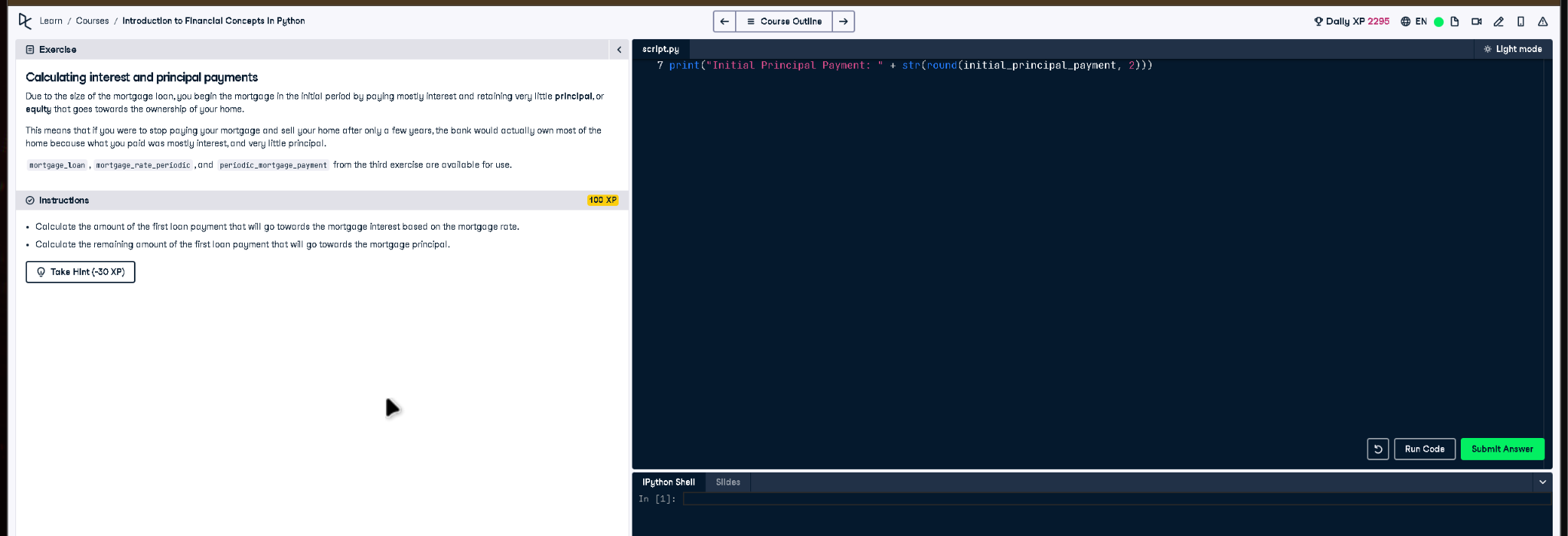
Interest and Principal Payment Calculation - Full Answer



# Full Code Answer:

# Given variables  
# mortgage\_loan, mortgage\_rate\_periodic, and periodic\_mortgage\_payment are provided.  
  
# Calculate initial interest payment  
initial\_interest\_payment = mortgage\_loan \* mortgage\_rate\_periodic  
  
# Calculate initial principal payment  
initial\_principal\_payment = periodic\_mortgage\_payment - initial\_interest\_payment  
  
print("Initial Interest Payment: " + str(round(initial\_interest\_payment, 2)))  
print("Initial Principal Payment: " + str(round(initial\_principal\_payment, 2)))

# Question:

Calculate the amount of the first loan payment that goes towards the mortgage interest and principal.

# 20-word Explanation (Question):

Each mortgage payment is split between interest and principal. The initial payment has a higher interest component and lower principal.

# Answer:

The interest portion is mortgage\_loan \* mortgage\_rate\_periodic, and the principal portion is periodic\_mortgage\_payment minus this interest.

# 20-word Explanation (Answer):

We calculate the interest portion first using the current balance and rate, then subtract it from the payment for principal.