**DAILY ASSESSMENT FORMAT**

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| **Date:** | **15/07/2020** | **Name:** | **Abhishek Vasudev Mahendrakar** | |
| **Course:** | **30 days coding challenge-HackerRank** | **USN:** | **4AL17EC003** | |
| **Topic:** | **Day 1-5** | **Semester & Section:** | **6th-‘A’** | |
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| **FORENOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Day 0: Hello, World.**  **Task** To complete this challenge, you must save a line of input from stdin to a variable, print Hello, World. on a single line, and finally print the value of your variable on a second line.  You've got this!  **Code:**  input\_string = input()  # Print a string literal saying "Hello, World." to stdout.  print('Hello, World.') Day 1: Data Types **Task** Complete the code in the editor below. The variables , , and  are already declared and initialized for you. You must:   1. Declare  variables: one of type *int*, one of type *double*, and one of type *String*. 2. Read  lines of input from stdin (according to the sequence given in the *Input Format* section below) and initialize your  variables. 3. Use the  operator to perform the following operations:     1. Print the sum of  plus your int variable on a new line.    2. Print the sum of  plus your double variable to a scale of one decimal place on a new line.    3. Concatenate  with the string you read as input and print the result on a new line.   **Code:**  i = 4  d = 4.0  s = 'HackerRank '  # Declare second integer, double, and String variables.  # Read and save an integer, double, and String to your variables.  # Print the sum of both integer variables on a new line.  # Print the sum of the double variables on a new line.  # Concatenate and print the String variables on a new line  # The 's' variable above should be printed first.  a= int(input())  print(a+i)  b= float(input())  print(d+b)  c= str(input())  print(s+c) Day 2: Operators **Task** Given the *meal price* (base cost of a meal), *tip percent* (the percentage of the *meal price* being added as tip), and *tax percent* (the percentage of the *meal price* being added as tax) for a meal, find and print the meal's *total cost*.  **Note:** Be sure to use precise values for your calculations, or you may end up with an incorrectly rounded result!  **Code:**  #!/bin/python3  import math  import os  import random  import re  import sys  # Complete the solve function below.  def solve(meal\_cost, tip\_percent, tax\_percent):      a= (meal\_cost \* tip\_percent)/100      b= (meal\_cost \* tax\_percent)/100      print(round(meal\_cost+a+b))  if \_\_name\_\_ == '\_\_main\_\_':      meal\_cost = float(input())      tip\_percent = int(input())      tax\_percent = int(input())      solve(meal\_cost, tip\_percent, tax\_percent) Day 3: Intro to Conditional Statements **Task** Given an integer, , perform the following conditional actions:   * If  is odd, print Weird * If  is even and in the inclusive range of  to , print Not Weird * If  is even and in the inclusive range of  to , print Weird * If  is even and greater than , print Not Weird   Complete the stub code provided in your editor to print whether or not n is weird.  **Code:**  #!/bin/python3  import math  import os  import random  import re  import sys    if \_\_name\_\_ == '\_\_main\_\_':      N = int(input())      if(N%2==1):          print("Weird")      elif (N in range(2,5)):          if N%2==0:              print("Not Weird")      elif (N in range(6,21)):          if N%2==0:              print("Weird")      elif (N>20 & N%2==0):          print("Not Weird") Day 4: Class vs. Instance **Task** Write a *Person* class with an instance variable, , and a constructor that takes an integer, , as a parameter. The constructor must assign  to  after confirming the argument passed as  is not negative; if a negative argument is passed as , the constructor should set  to  and print Age is not valid, setting age to 0.. In addition, you must write the following instance methods:   1. *yearPasses()* should increase the  instance variable by . 2. *amIOld()* should perform the following conditional actions:    * If , print You are young..    * If  and , print You are a teenager..    * Otherwise, print You are old..   **Code:**  class Person:      def \_\_init\_\_(self,initialAge):          # Add some more code to run some checks on initialAge          if initialAge<0:              print("Age is not valid, setting age to 0.")              initialAge=0          self.age = initialAge      def amIOld(self):            if self.age<13:              print("You are young.")          elif ((self.age>=13) & (self.age<18)):              print("You are a teenager.")          elif self.age>=18:              print("You are old.")      def yearPasses(self):          # Increment the age of the person in here          self.age+=+ 1  t = int(input())  for i in range(0, t):      age = int(input())      p = Person(age)      p.amIOld()      for j in range(0, 3):          p.yearPasses()      p.amIOld()      print("") Day 5: Loops **Task** Given an integer,n , print its first 10 multiples. Each multiple n x i (where 1<=i<=10) should be printed on a new line in the form: n x i = result.  Code:  import math  import os  import random  import re  import sys  def mul(m):      return m\*n  if \_\_name\_\_ == '\_\_main\_\_':      n = int(input())  for m in range(1,11):      ans= mul(m)      print(n,'x',m,"=",ans) | | | |