

MAGNO SOFTWARE DEVELOPMENT & TRAINING SERVICES

BASIC PYTHON PROGRAMMING

Identification:

1. Allows the programmer to enter the program **source code** and save it to files.
2. Computer **program** that directly executes, i.e. performs, instructions written in a **programming** or scripting language
3. Translates the source code to target code.
4. Allows programmers to simultaneously run a program and see which source code line is currently being executed.
5. Used to evaluate a program's performance

Enumeration:

- 6 – 10. Development tools of a programmer
- 11 – 21. Qualities of Python
- 22 – 25. Basic Concepts
- 26 – 31. Basic Datatypes
- 32– 33. Kinds of Datatypes
- 34. Example of item 32
- 35. Example of item 33

Application:

36 – 50. Create a payroll system:

```
>>> payroll()
+-----+-----+-----+-----+
| ID | NAME | DESIGNATION | MONTHLY SALARY |
+-----+-----+-----+-----+
| 001 | John | Manager | 50000 |
| 002 | Daryl | Supervisor | 60000 |
| 003 | Jerome | Project Manager | 35000 |
| 004 | Ashley | Department Head | 75000 |
| 005 | Mar Lan | Sales Head | 70000 |
+-----+-----+-----+-----+
Enter Employees ID:001
Days Rendered:16
GrossIncome: 26666.67
Compute Again? [YES/NO]:yEs
+-----+-----+-----+-----+
| ID | NAME | DESIGNATION | MONTHLY SALARY |
+-----+-----+-----+-----+
| 001 | John | Manager | 50000 |
| 002 | Daryl | Supervisor | 60000 |
| 003 | Jerome | Project Manager | 35000 |
| 004 | Ashley | Department Head | 75000 |
| 005 | Mar Lan | Sales Head | 70000 |
+-----+-----+-----+-----+
Enter Employees ID:002
Days Rendered:12
GrossIncome: 24000.0
Compute Again? [YES/NO]:no
bye!
```

The whole app must be under a function named "payroll"

Display the list of employees showing their ID, NAME, DESIGNATION, MONTHLY SALARY

Ask for employee's ID

Ask for the number of days rendered

Output will be the Employee's Gross income

Ask the user to compute again. Take note that the app must accept whether it is upper case, lowercase or mixed case

The list will be displayed again for the user's reference

Inputs will be asked again

Take note if the user responded not to compute again, the app will print "bye!" and terminate the looping.

50 – 65. Create a looping statement that will distinguish odd and even numbers:

```
>>> oddEven()  
From what number would you like to process?1  
Up to what number would you like to process?21  
  
There are 10 Even Numbers: 2 4 6 8 10 12 14 16 18 20  
There are 11 Even Numbers: 1 3 5 7 9 11 13 15 17 19 21
```

Ask the user's range of numbers to evaluate

Count the qty of odd and even

Display the said numbers

65 – 75. Quiz Game:

```
Sino ang pambansang bayani ng Pilipinas?  
Sagot:Jose Rizal  
tama!  
  
Ilan ang miyembro ng IV of Spades?  
Sagot:  
Ilan ang miyembro ng IV of Spades?  
Sagot:  
Ilan ang miyembro ng IV of Spades?  
Sagot:  
Answer is: 3  
  
Player Name: John Doe  
Hi John Doe Your Score is 75  
  
New game? [oo/hindi]:
```

Create 10 Questions. Saved in a dictionary
Each Question has its corresponding answer and score.
the total must be 175 points.

If the question was answered right, the app must move on the the next question

If the user failed to answer the question, the app must be able to give the user 3 attempts.
After 3 attempts, the app will display the right answer and move on to the next question

THE QUESTIONS MUST BE RANDOM AND MUST NOT DISPLAY AGAIN WHEN ASKED.

After asking 10 questions, the app must ask for the player's name.

The app must return a message containing the player's name and the player's score.

The user will be asked for a new game.
oo - Start a new game, reset score
hindi - display "bye!"

75 – 80. Rock, Paper and Scissors:

```
[1]Rock, [2]Paper, [3]Scissors  
Please choose your weapon:1  
You chose ROCK  
Computer chose SCISSORS  
You Win!  
New Game?[YES/NO]:yes  
  
[1]Rock, [2]Paper, [3]Scissors  
Please choose your weapon:3  
You chose SCISSORS  
Computer chose ROCK  
You Lose!  
New Game?[YES/NO]:yes  
  
[1]Rock, [2]Paper, [3]Scissors  
Please choose your weapon:3  
draw!  
New Game?[YES/NO]:no
```

Show what the user chose

Randomize computer's option then show it

Display the game's result

Ask if the user wants to play again.

Show the option where the user needs to choose for a weapon

81 – 100: Compile all of these to one main app:

```
Welcome to our Portal
```

```
[1] Payroll [2]Odd and Even Processor [3] Games
What would you like to use? 3
[1] Quiz game [2]Rock Paper and Scissors
What game would you like to play?
```

If the user chose "Games",
sub menu will ask the user
which game to play.

```
[1]Rock, [2]Paper, [3]Scissors
Please choose your weapon:1
You chose ROCK
Computer chose SCISSORS
You Win!
New Game?[YES/NO]:no
```

```
Welcome to our Portal
```

```
[1] Payroll [2]Odd and Even Processor [3] Games
What would you like to use?
```

Everytime the user exits in
each option, the user will
have a chance to access the
main menu

Note:

The syntax must be provided with comments describing the code that was written.
Failure to explain the code written will void the whole output.

Good Luck Guys!