



WELCOME to your very first task from the machine learning department of GDSC isi ariana

We are very thrilled to start this adventure with you, and hope that we will all be able to learn and grow even more this year !

As promised we will try to make your learning experience as smooth as possible

You are going to start your journey by learning the very famous programming language **Python** but why python you might ask ?! Python is a very simple language (easy to write and fix(debug)) and it provides a lot of libraries that can simplify our machine learning tasks, but then again what is a library you might ask ?! To put it simply it's just a collection of prewritten code (usually written by experts) that you can use instead of having to write it yourself, as an example the famous math library in python .

Let's assume you are trying to calculate the cosine of a number instead of having to write the whole code yourself you can just type the following :

```
Import math
```

```
Number= #any value you can think of
```

```
Result = math.cos(Number)
```

```
print("the result is ",Result)
```

And that's all !

Part 1 of the task


Back to our subject,Python is used in various fields like making websites and games but it's particularly used in machine learning because of some well known libraries like "numpy" ,"pandas","sklearn",... but using those can be a little tricky and overwhelming at first so let's ignore them for now and just

start by learning basic python and for that we suggest the following resources a collection of selected youtube videos :

First video : <https://www.youtube.com/watch?v=6yrsX752CWk>

Second video : <https://www.youtube.com/watch?v=kTGuqOLp6uQ>

Third Video : <https://www.youtube.com/watch?v=6iF8Xb7Z3wQ>

Presentation : you need to go through this presentation prepared by our mentor Belhassen Essid  Python x DSC ISI Ariana At the end of the presentation you need to solve the indicated problems, but don't worry feel free to ask any member of our team for help !

NOTE : feel free to watch other videos if you don't like the ones we suggest as long as you make sure to study the same stuff indicated in the titles.

By the end of this first step you should have an understanding of :

- 1.variables and data types in python
- 2.Conditional Statements
- 3.Loops and Iterations
- 4.solved the Problems from the presentation

Part 2 of the task

Once you are done watching these videos and solving the problems you will have a better understanding of python and you should feel comfortable enough to start using it in a specialized way like web development ,game development or machine learning.

Now let's start tackling the tricky parts. The second step in your journey will be to join the kaggle family, Kaggle is a popular platform that hosts online machine learning competitions but it also provides courses for beginners . You will start by making an account there at <https://www.kaggle.com/> And then you need to go through the following courses :

Python : <https://www.kaggle.com/learn>

Pandas : <https://www.kaggle.com/learn/pandas>

Extra: if you feel confident try

<https://www.kaggle.com/learn/intro-to-machine-learning>

Once you are done with these courses you should receive a certificate, congratulations to you !

Now you know a lot about python and should be able to start learning more about machine learning in our sessions starting 10/11/2021

Part 3 of the task

Your final mission will be to email both certificates to this email address : mohamedaziz.bennessir@etudiant-isi.utm.tn with the subject : "[GDSC ISI] [beginners first task] YOUR NAME"

Deadline : 9/11/2021 23:59

And this marks the end of your journey ! well done, I salute you, And hopefully see you soon !