

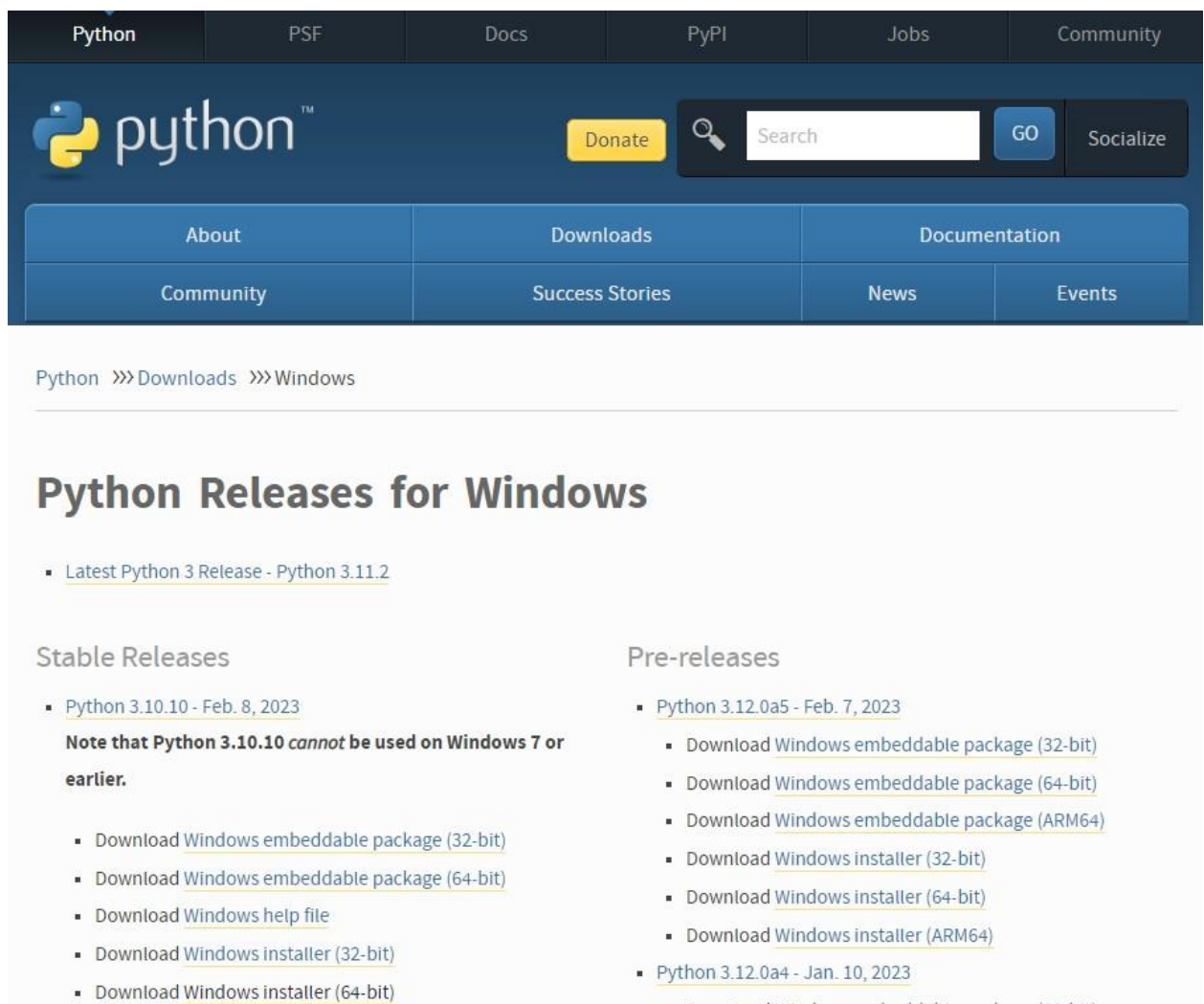
Week -1: Basics

1) Python

Installation:

Windows:

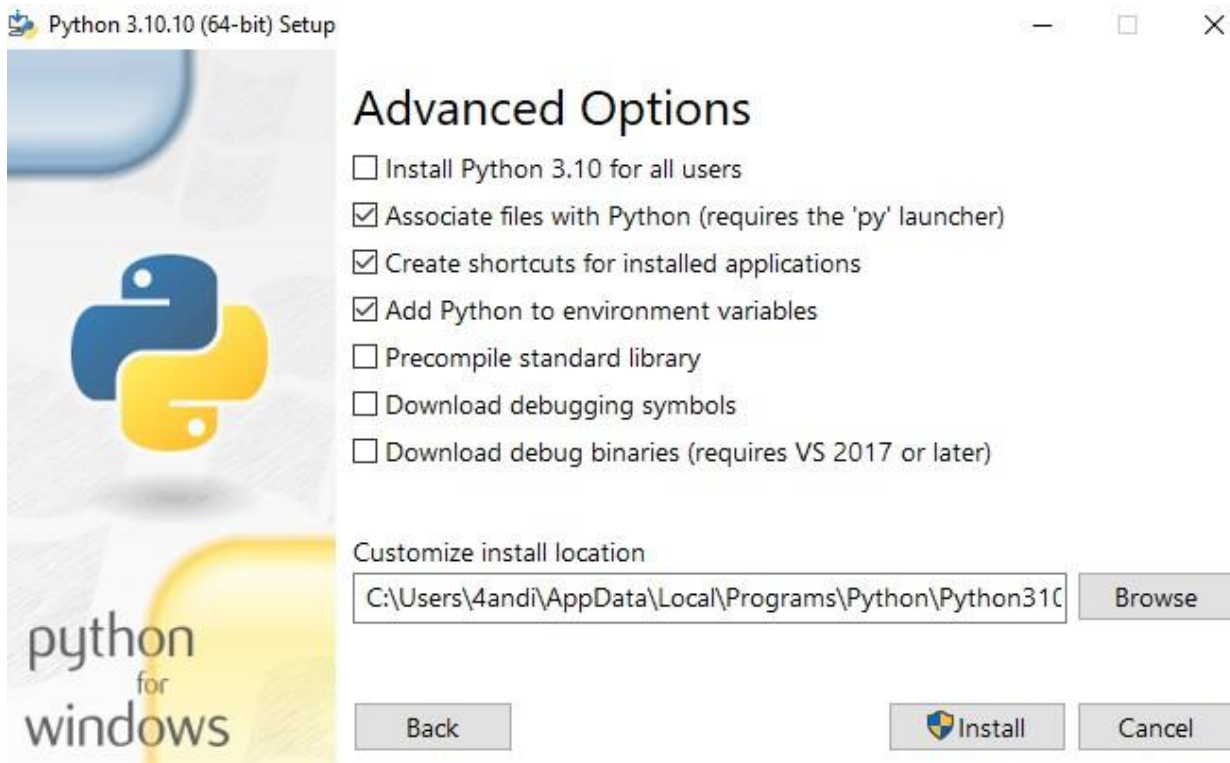
1. Download Python: Go to the official python website at <https://www.python.org/downloads/> and click on the “Download Python” button. Choose the latest version for windows.



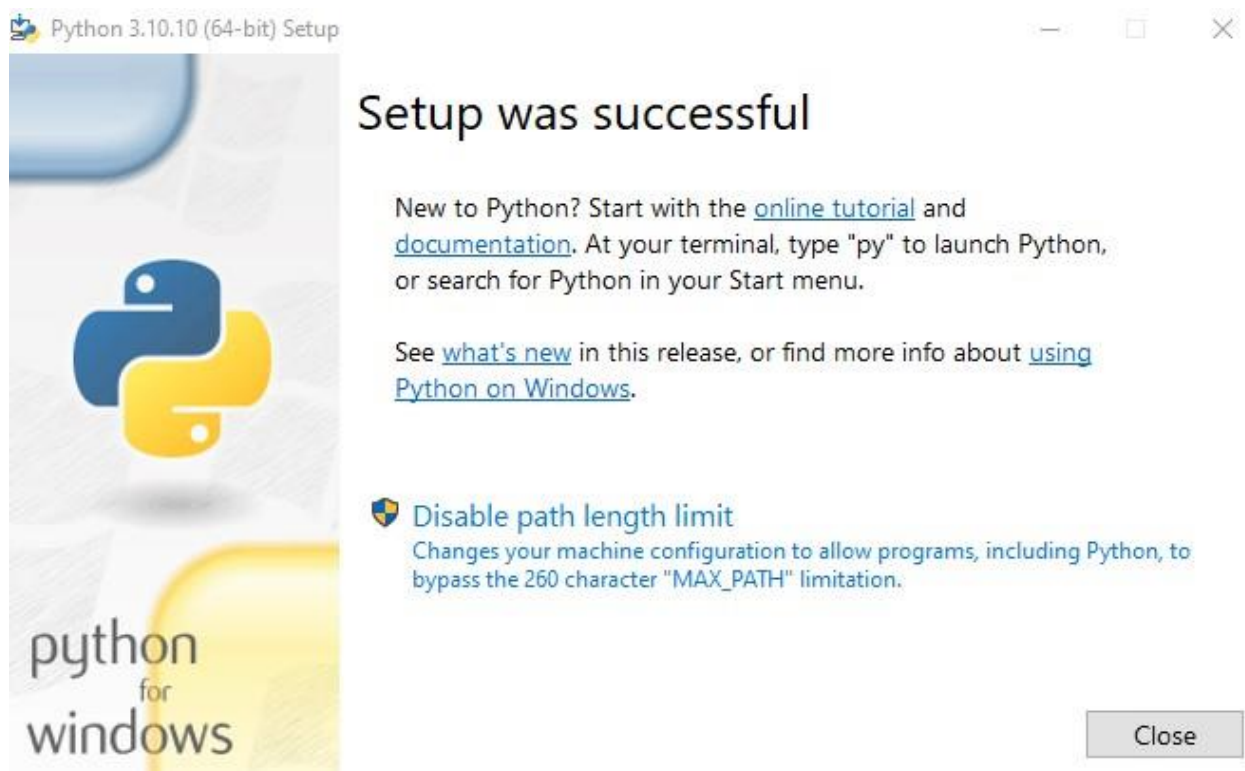
2. Run Installer: Locate the downloaded installer file (usually named something like python-3.10.10.exe) and double-click it to run the installer.



3. Customize Installer (Optional): On the first screen of the installer, make sure to check the box that says “Add Python 3.x to PATH.” This will make it easier to run Python from the Command Prompt. You can also customize the installation directory if needed.



4. Install Python: Click the “Install now” button to start the installation process. The installer will copy the necessary files to your system.
5. Installation complete: Once the installation is complete, you’ll see a screen that says “Setup was successful.” You can now close the installer.



2. Start a Python interpreter and use it as a Calculator.

#Calculator

```
a=int(input("enter a
number"))
b=int(input("enter a
number"))
print("add:",a+b)
```

```
print("sub:",a-b)

print("multiplication

:",a*b)

print("division:",a/b
```

) **Output:**

```
enter a
number 4

enter a
number 5

add: 9 sub:
-1

multiplicati
on: 20

division:
0.8
```

3. Write a program to purposefully raise Indentation Error and correct it. #Indentation Error a=5

```
b=2

print("
add:",a
+b)

#corre

ct

progra
```

m a=5

b=2

Print("add:",a+b

) **Output:**

7

4. i) Write a program to calculate compound interest when principal, rate and number of periods are given.

Program:

```
#compound interest
```

```
#p=principle,r=rate,t=time period,CI=compound interest,A=amount
```

```
after time period p=1000 r=2
```

```
t=3
```

```
A=p*((1+r/100)*
```

```
*t) CI=A-p
```

```
print("amount after time
```

```
period",A)
```

```
print("compound
```

```
intrest:",CI) output:
```

```
amount after time period 1061.208
```

```
compound intrest:
```

```
61.2080000000000084
```

ii) Given coordinates (x1, y1), (x2, y2) find the distance between two points Program:

```
x1=int(input("enter the x1 value"))
```

```
x2=int(input("enter the x2 value"))
```

```
y1=int(input("enter the y1 value"))
```

```
y2=int(input("enter the y2 value"))
```

```
d=((x1-x2)**2+(y1-y2)**2)**(1/2)
```

```
print("distance between two given
```

```
points is ",d) output:
```

```
enter the x1
```

```
value0 enter
```

```
the x2 value2
```

```
enter the y1
```

```
value0 enter
```

```
the y2 value2
```

```
distance between two given points is 2.8284271247461903
```

5. Read name, address, email and phone number of a person through keyboard and print the details.

Program:

```
name=input("enter your name ")
```

```
email_id=input("enter your email-id :")
```

```
phone_no=int(input("enter your phone
```

```
number :")) address=input("enter your
```

```
address :) print("Name:",name)
```

```
print("Email-id:",email_id) print("Phone-
```

```
no:",phone_no)
```

```
print("Address:",address) output:
```

```
enter your name :Divya enter
```

```
your email-id
```

:divya@gmail.com enter your

phone number :987654321

enter your address:

Hyderabad,Telangana

Name: Divya

Email-id: divya@gmail.com

Phone-no: 987654321

Address: Hyderabad,Telangana