Hello World

In [2]:

```
print("hello");
```

```
hello
```

variables

In [10]:

```
a=10;
b=10.5;
print(type(a+b))
```

```
<class 'float'>
```

In [4]:

```
print(type(a));
```

```
<class 'int'>
```

In [7]:

```
a="hello"
print(type(a));
```

```
<class 'str'>
```

In [8]:

```
d=5+4j
print(type(d));
```

```
<class 'complex'>
```

Taking input

In [12]:

```
name=input()
print("hello",name)
```

```
yash gandhi
hello yash gandhi
```

In [18]:

```
a=input("Enter your name: ");
print("hello",a);     #includes space
print("hello"+a);     #not include space
```

```
Enter your name: yash gandhi
hello yash gandhi
helloyash gandhi
```

typecasting

In [19]:

```
a=input("Enter a number: ");
print("the number you entered is:",a,end=" ");    #end parameter in a function
                                                   #by default its value is \n for print statement a
this is
                                                   #executed every time a print statement is execute
print("type of a :",type(a))
```

```
Enter a number: 45
the number you entered is: 45 type of a : <class 'str'>
```

In [23]:

```
a=float(input("Enter a number: "))
print("the number you entered is:",a,end="\n\n")    #end parameter in a function
                                                     #by default its value is \n for print statement
and this is
                                                     #executed every time a print statement is
executed
print("type of a :",type(a))
print("the square is : "+str(a*a))                 #typecasted to str again
```

```
Enter a number: 4.234
the number you entered is: 4.234

type of a : <class 'float'>
the square is : 17.926756
```

More on print fuction

In [31]:

```
print("+yash","gandhi","hello","world",sep="+\n+") #seperator
```

```
+yash+
+gandhi+
+hello+
+world
```

In [32]:

```
a=45
b="harayana"
print("{0} people live in {1}".format(a,b))
```

```
45 people live in harayana
```

In [33]:

```
a=45
b="harayana"
c="india"
print("{0} people live in {1} a state in {2}".format(a,b,c))
```

```
45 people live in harayana a state in india
```

In [38]:

```
print("hello %d people of %s living in %s"%(a,b,c))
```

```
hello 45 people of harayana living in india
```

Operators

In [48]:

```
a=10;
b=3;
print(a/b,type(a/b))                    #floating point returned
print(a//b,type(a//b))                  #integer division
```

```
3.3333333333333335 <class 'float'>
3 <class 'int'>
```

In [45]:

```
print("hello",45)              #but print("hello "+ 45) is invalid statement
```

```
hello 45
```

In [55]:

```
a=77
b=64
print("%0.4f"%(a//b))
print("%0.4f"%(a/b))
```

```
1.0000
1.2031
```

In [56]:

```
print(a**b)
```

```
54375894091967550109295198216457840670243091223019263669103547576269058013890850350746679258443491676282966808168064 1
```

In [57]:

```
print(a%b)
```

```
13
```

In [63]:

```
a,b,c=10,"hello",30.23        #multiple variable assignment
print("%0.2f"%(a+c),"times "+b+" to you")
```

```
40.23 times hello to you
```

comments

In [64]:

```
#hello world
"""multiline
cceniewiunfvrv
cmevm"""

string="""multiline
cceniewiunfvrv
cmevm"""

print(string)
```

```
multiline
```

```
cceniewiunfvrv
cmevm
```

In [69]:

```
#hello world
"""multiline
cceniewiunfvrv
cmevm"""                        #printed as jupyter is bad!!
```

Out[69]:

```
'multiline\ncceniewiunfvrv\ncmevm'
```

more on operators

In [71]:

```
raining=True             #T is capital
temp=27
out=not raining and temp>45
print(out)

out=not raining and temp==27
print(out)

out=raining and temp>45
print(out)

out=raining and temp<45
print(out)
```

```
False
False
False
True
```

In [72]:

```
raining=True             #T is capital
temp=27
out=not raining or temp>45
print(out)

out=not raining or temp==27
print(out)

out=raining or temp>45
print(out)

out=raining or temp<45
print(out)
```

```
False
True
True
True
```