Corso ITS: *ARTIFICIAL INTELLIGENCE SPECIALIST*

Modulo: **Programmazione Procedurale in Python**

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08:30 - 14:30

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orienteering in Python

In [1]:
```
b  = bool()
s  = str()
i  = int()
f  = float()
li = list()
se = set()
di = dict()
```

type()

In [2]:
```
print(type(b))
print(type(s))
print(type(i))
print(type(f))
print(type(li))
print(type(se))
print(type(di))
```

```
<class 'bool'>
<class 'str'>
<class 'int'>
<class 'float'>
<class 'list'>
<class 'set'>
<class 'dict'>
```

In [3]:
```
print(b)
print(s)
print(i)
print(f)
```

```
print(li)
print(se)
print(di)
```

```
False

0
0.0
[]
set()
{}
```

---

dir()

- è possibile interrogare i metodi a disposizione
- e così scoprire funzioni utili

In [4]:
```
metodi =  dir(li)
for metodo in metodi :
    if not metodo.startswith('__') :
        print(metodo)
```

```
append
clear
copy
count
extend
index
insert
pop
remove
reverse
sort
```

In [5]:
```
metodi.reverse()
for metodo in metodi :
    if not metodo.startswith('__') :
        print(metodo)
```

```
sort
reverse
remove
pop
insert
index
extend
count
copy
clear
append
```

In [6]:
```
metodi =  dir(di)
for metodo in metodi :
    if not metodo.startswith('__') :
```

```
        print(metodo)
```

```
clear
copy
fromkeys
get
items
keys
pop
popitem
setdefault
update
values
```

In [7]:
```
import math
print(dir(math))
```

```
['__doc__', '__file__', '__loader__', '__name__', '__package__', '__spec__',
'acos', 'acosh', 'asin', 'asinh', 'atan', 'atan2', 'atanh', 'cbrt', 'ceil',
'comb', 'copysign', 'cos', 'cosh', 'degrees', 'dist', 'e', 'erf', 'erfc', 'e
xp', 'exp2', 'expm1', 'fabs', 'factorial', 'floor', 'fmod', 'frexp', 'fsum',
'gamma', 'gcd', 'hypot', 'inf', 'isclose', 'isfinite', 'isinf', 'isnan', 'is
qrt', 'lcm', 'ldexp', 'lgamma', 'log', 'log10', 'log1p', 'log2', 'modf', 'na
n', 'nextafter', 'perm', 'pi', 'pow', 'prod', 'radians', 'remainder', 'sin',
'sinh', 'sqrt', 'tan', 'tanh', 'tau', 'trunc', 'ulp']
```

In [8]:
```
import random
print(dir(random))
```

```
['BPF', 'LOG4', 'NV_MAGICCONST', 'RECIP_BPF', 'Random', 'SG_MAGICCONST', 'Sy
stemRandom', 'TWOPI', '_ONE', '_Sequence', '_Set', '__all__', '__builtins__'
, '__cached__', '__doc__', '__file__', '__loader__', '__name__', '__package_
_', '__spec__', '_accumulate', '_acos', '_bisect', '_ceil', '_cos', '_e', '_
exp', '_floor', '_index', '_inst', '_isfinite', '_log', '_os', '_pi', '_rand
om', '_repeat', '_sha512', '_sin', '_sqrt', '_test', '_test_generator', '_ur
andom', '_warn', 'betavariate', 'choice', 'choices', 'expovariate', 'gammava
riate', 'gauss', 'getrandbits', 'getstate', 'lognormvariate', 'normalvariate
', 'paretovariate', 'randbytes', 'randint', 'random', 'randrange', 'sample',
'seed', 'setstate', 'shuffle', 'triangular', 'uniform', 'vonmisesvariate',
'weibullvariate']
```

RIPASSO GENERALE