

```
1. Print student with highest marks
f highest_marks(s1_name, s1_marks, s2_name, s2_marks, s3_name, s3_marks):
    data = {s1_name: s1_marks, s2_name: s2_marks, s3_name: s3_marks}
    top = max(data, key=data.get)
    print("Highest marks:", top, "-", data[top])
highest_marks(s1_name="Sree", s1_marks=80, s2_name="Anu", s2_marks=90, s3_name="Ra
```

Highest marks: Anu - 90

```
# 2. Return domain name like 'in' or 'com'
def get_domain(url):
    return url.split('.')[1]
print("Domain:", get_domain("www.amazon.in"))
```

Domain: in

```
# 3. Calculate years and months until March 2024
def calculate_age(m, y):
    total_months = (2024 * 12 + 3) - (y * 12 + m)
    years = total_months // 12
    months = total_months % 12
    print(years, "years and", months, "month")
calculate_age(2, 2004)
```

20 years and 1 month

```
# 4. Check if 4-bit binary is odd or even
def check_binary(b):
    if b[-1] == '1':
        return "Odd"
    else:
        return "Even"
print(check_binary("1011"))
```

Odd

```
# 5. Find difference between two sets
s1 = {1, 2, 3}
s2 = {3, 4, 5}
print("Difference:", s1 - s2)
```

Difference: {1, 2}

```
# 6. Roll two dice and print their sum
import random
def roll():
    d1 = random.randint(1, 6)
    d2 = random.randint(1, 6)
    print(f"dice_values: ({d1},{d2}) and sum: {d1+d2}")
roll()
```

dice_values: (1,1) and sum: 2

```
# 7. Sum only the numbers in a mixed list
def sum_nums(lst):
    total = 0
    for x in lst:
        if type(x) == int or type(x) == float:
            total += x
    return total
print("Sum:", sum_nums(["a", 10, 20, "b"]))
```

Sum: 30

```
# 8. Print all arrangements of a, b, c
from itertools import permutations
def perms():
    for p in permutations(['a', 'b', 'c']):
        print"".join(p)
perms()
```

abc
acb
bac
bca
cab
cba

```
# 9. Convert "1,2,3" to [1,2,3]
def get_list(s):
    return [int(x) for x in s.split(',')]
print(get_list("2,4,1,5,3"))
```

[2, 4, 1, 5, 3]

```
# 10. Return average of numbers in a list
def average(lst):
    return sum(lst) / len(lst)
print("Average:", average([10, 20, 30]))
```

Average: 20.0