

PYTHON

From Simple to Complex With Examples

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NOTE!!!

In these notes Screenshots of practice examples and coding are added. The code files are also available in code folder that contain .ipynb files that are created on Jupyter notebook.

Chapter4

Conditional Statements

- **If/else**

If else statement is used to check any condition. If condition true executes if statement otherwise executes else statement.

- **Pass**

If nothing in if block it shows error so put pass statement to avoid from error.

```
age=int(input("Enter your age:"))
if age>=14:
    print("You are above 14 years")
    #if nothing in if block than give error it can be removed by pass statement
    #pass
else:
    print("you are below 14")
    #else statement cannot be alone it is always after if statement on the other hand if statement
```

Enter your age:26
You are above 14 years

- **Nested If/else**

Nested if else mean if/else inside if or else statement.

```
age=int(input("Enter your age:"))
marks=80
▼ if age>=14:
▼     if(marks==80):
        print("You are above 14 years and marks are 80")
▼     else:
        print('marks not 80')
▼ else:
    print("you are below 14 and marks not 80")
```

Enter your age:56

You are above 14 years and marks are 80

- **If_elif_else**

It check if statement if true print it otherwise checks elif statement if true print it otherwise goto next elif if all if statements and elif statements are wrong than it prints else statement.

```
marks=int(input("Enter your marks between 0-100:"))
if marks<0:
    print("Marks can't be negative!!!")
elif marks>=0 and marks<=35:
    print("you are fail!!!")
elif marks>35 and marks<=50:
    print("you have C grad")
elif marks>50 and marks<85:
    print("you have B grad")
elif marks>=85 and marks<=100:
    print("you have A grad")
else:
    print("Marks are out of range")
```

Enter your marks between 0-100:70
you have B grad

• TODO Task

Take input of user name and age if user name is start with A or a and age>10 than can Play game otherwise not.

```
print("*****!!!Play Game!!!*****")
name=input("Enter your name:")
age=int(input("Enter your age:"))
if (name[0]=='a' or name[0]=='A') and age>=10:
    print("Hoorayyy!!! You can Play Game")
else:
    print("Sorry!!! You cannot Play Game")
```

```
*****!!!Play Game!!!*****
Enter your name:ayesha
Enter your age:26
Hoorayyy!!! You can Play Game
```

• TODO Task

Choose any character from (a-z) as winning character than take a character from user as input and check if guessing character of user is same as character that we choose than print you win otherwise print you lose.

```
print("*****Character GUESSING GAME*****")
winning_character='a'
guessing_character=input("Guess any character from (a to z):")
if guessing_character==winning_character:
    print("You Win!!!")
else:
    print('You lose')
```

```
*****Character GUESSING GAME*****
Guess any character from (a to z):a
You Win!!!
```

- **In keyword**

In keyword is used to check any character in string present or not as,

```
name=input("Enter your name:")
character=input("Enter any character which you want to find out in name:")
▼ if character in name:
    → print(f" {character} is present")
▼ else:
    → print(f"{character} is not present")
```

```
Enter your name:ayesha
Enter any character which you want to find out in name:a
a is present
```


- **TODO Task**

It checks a string if not empty executes if statement otherwise else statement is executed.

```
name=input("Enter your name:")  
if name:  
    print(f"your name is:{name}")  
else:  
    print("You enter nothing")
```

```
Enter your name:  
You enter nothing
```