

Conditional Statement and Its Variations

Conditional Statements. Conditional Statement is totally based on conditions it will execute that block of code which gives us True result. It gives you the order of execution and in what order the statements will execute Example: If(Tomorrow is Sunday):if (weather is good):Then i will go to play cricket elif(Tomorrow is Saturday): Then i will go to watch movie elif(tomorrow is Monday): I will do my homework elif(Tomorrow is Tuesday): Then i will go to temple else: Sleep

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In [ ]: In python programming conditional statement are totally based on if and else
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Variations of Conditional Statement 1.If --> if we have a single condition use only if statement 2.If-else --> if we have two conditions then we will use if and else 3.If elif condition --> if we have multiple conditions and based on the true condition we want to execute a block. 4.Nested if else

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In [ ]: #1.If statement
Syntax:
if condition:
    statement1
    statement2
    statement3
    statement4
```

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In [21]: #Example:
student_name=input("Enter your name")
student_rollno=int(input("Enter your roll no"))
if student_name=="pratyush" and student_rollno==100:
    print("Hello"+ student_name+"Welcome to Edyoda")
    print("Helloworld")
print("Hello world")

Enter your namepratyush
Enter your roll no100
Hello pratyushWelcome to Edyoda
Helloworld
```

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In [ ]: if else statement
Syntax:
if condition:
    statement1
    statement2
    statement3
    statement4
else:
    Statement5
    Statement6
```

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In [1]: #example
student_name=input("Enter your name")
student_rollno=int(input("Enter your roll no"))
if student_name=="anil" or student_rollno==100:
    print("Hello Anil You are the topper of this class")
else:
    print("Sorry you are not a Topper student")
print("Hello world")

Enter your nameashu
Enter your roll no12
Sorry you are not a Topper student
Hello world
```

```
In [ ]: if elif condition
Syntax:
if condition:
    statement1
    statement2
    statement3
    statement4
elif condition:
    statement5
    statement6

elif condition:
    statement7
    statement8
```

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In [28]: #Example of if elif
x=input("Enter the Today's Day")
if(x=="Sunday"):
    print("Then i will go to play cricket")
elif(x=="Saturday"):
    print("Then i will go to watch movie")
elif(x=="Monday"):
    print("I will do my homework")
elif(x=="Tuesday"):
    print("Then i will go to temple")

Enter the Today's DayWednesday
```

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In [ ]: #Else part will always be optional
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In [30]: #if elif else condition
x=input("Enter the Today's Day")
if(x=="Sunday"):
    print("Then i will go to play cricket")
elif(x=="Saturday"):
    print("Then i will go to watch movie")
elif(x=="Monday"):
    print("I will do my homework")
elif(x=="Tuesday"):
    print("Then i will go to temple")
else:
    print("Sleep")

Enter the Today's Dayqwerty
Sleep
```

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In [ ]: #Nested if else: if we have conditional statement inside another conditional statement
Syntax:
    if condition:
        if condition
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In [35]: #if elif else condition
x=input("Enter the Today's Day")
y="Weather is g"
if(x=="Sunday"):
    print("Hurray Today is Sunday")
    if(y=="Weather is good"):
        print("Then i will go to play cricket")
    else:
        print("Weather is bad")
elif(x=="Saturday"):
    print("Then i will go to watch movie")
elif(x=="Monday"):
    print("I will do my homework")
elif(x=="Tuesday"):
    print("Then i will go to temple")
else:
    print("Sleep")

Enter the Today's Dayqwert
Sleep
```

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In [40]: #Odd even
n=int(input("Enter a number"))
if n%2==0:
    print("Number is even")
else:
    print("Number is odd")

Enter a number10
Number is even
```

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In [43]: #Divide by 3
n=int(input("Enter a number"))
if n%3==0:
    print("Reminder is 0")
elif n%3==1:
    print("Remibder is 1")
elif n%3==2:
    print("Reminder is 2")

Enter a number14
Reminder is 2
```

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In [48]: #Admin and user
#Create user
User_name=input("Enter your name:")
User_email=input("Enter email:")
User_pass=input("Enter password")
if User_name=="Pratyush" and User_email=="pratyush@gmail.com" and User_pass=="qwerty":
    print("Welcome Pratyush How may i help you")
else:
    print("Invalid Credentials")

Enter your name:Pratyush
Enter email:pratyush@gmail.com
Enter passwordqwertyuio
Invalid Credentials
```

```
In [ ]: #Result Card:
Take input of student name -->
Take input of roll no -->
enter your maths subject marks
enter english
Your total marks are
you obtained
average
Your grade is

Thank you for Visiting
```

```
In [ ]: Leap Year Condition:
if year is divisible by 400 then is_leap_year
else if year is divisible by 100 then not_leap_year
else if year is divisible by 4 then is_leap_year
else not_leap_year
Print the year is leap year or not
```

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In [ ]: Voter is eligible or not
n=int(input("Enter the age"))
if 18<=n:
    user is valid for vote
else:
    not valid
```

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In [ ]: #Whether a given number is divisible by 7 or not
n=int(input())
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In [51]: student_name=input("enter your name:")
student_age=int(input("enter your age:"))
if(student_name == "pavan" and student_age== 10):
    print("hello")
else:
    print("thank you")

enter your name:pavan
enter your age:10
hello
```

```
In [54]: if "boat" in {"boat":1, "zoo":2}:
    print(1)
    print(2)

print(4)

1
2
4
```