

Python Day 7

Chapter 7 Making Decisions

7.1 Using If, if-else, if-elif-else Construct

Decision Making Constructs are useful to execute a particular code based on some conditions. Code can be executed conditionally using if construct. Other optional decisions are elif and else. The if statement is one of the easiest methods of making decisions in Python. It states that if a condition is true, Python should execute the steps that follow. There is no switch case in python. You can only use if...elif..else construct to select options. The Dictionary datatype can also be used instead of switch case.

There are three situations to use the if statement

- if evaluates either true or false
- if and else evaluates both true and false

Example 1

When you want to check if a number is Even . We can use a simple if statement.

```
number=int(input("Enter Number : "))
if number%2==0:
    print("Even Number")
```

Result

```
Enter Number : 8
Even Number
```

Example 2

When you want to check if a given number is Even or Odd. We can simple if and else statements together.

```
number=int(input("Enter Number : "))
if number%2==0:
    print("Even Number")
else:
    print("Odd Number")
```

Result

```
Enter Number : 7
```

Odd Number

Enter Number : 8

Even Number

Task

1. WAP a program to input the marks of a student and print the result PASS or FAIL. If marks are less than 35, result is FAIL. If marks are 35 or more result is PASS.
2. WAP to input bill no. and sales amount. Display bill no., sales amount, sales tax and net amount. sales tax is 5% of sales, if sales is upto 5000 otherwise 10%
3. WAP a program to accept employee number (en) and basic salary(bs) from the keyboard. calculate and display dearness allowance (da) as 63% of basic salary, house rent allowance (hra) as 40% of basic salary, special allowance(sa) as 15% of basic salary whenever basic salary is over rs 3500,otherwise no special allowance is to be given, gross salary(gs) is $bs+da+hra+sa$.
4. WAP a program to input a number and then print with a suitable message whether it is divisible by 17 or not
5. WAP a programs to input a number and print weather it is Odd or Even.