

### computePay

Write a C function that determines the gross pay for an employee in a company. The company pays straight-time for the first 160 hours worked by each employee for four weeks and pays time-and-a-half for all hours worked in excess of 160 hours. The function takes in the number of hours each employee worked for the four weeks, and the hourly rate of each employee. Write the function in two versions. The function computePay1() returns the gross pay to the calling function, while the function computePay2() returns the gross pay to the calling function through the pointer parameter, grossPay. The function prototypes for the function are given as follows:

```
double computePay1(int noOfHours, int payRate);
void computePay2(int noOfHours, int payRate, double *grossPay);
```

A sample program template is given below to test the functions:

```
#include <stdio.h>
double computePay1(int noOfHours, int payRate);
void computePay2(int noOfHours, int payRate, double *grossPay);
int main()
{
    int noOfHours, payRate;
    double grossPay;

    printf("Enter number of hours: \n");
    scanf("%d", &noOfHours);
    printf("Enter hourly pay rate: \n");
    scanf("%d", &payRate);
    printf("computePay1(): %.2f\n", computePay1(noOfHours, payRate));
    computePay2(noOfHours, payRate, &grossPay);
    printf("computePay2(): %.2f\n", grossPay);
    return 0;
}
double computePay1(int noOfHours, int payRate)
{
    /* Write your code here */
}
void computePay2(int noOfHours, int payRate, double *grossPay)
{
    /* Write your code here */
}
```

Some sample input and output sessions are given below:

(1) Test Case 1:

Enter number of hours:

176

Enter hourly pay rate:

6

computePay1(): 1104.00

computePay2(): 1104.00

(2) Test Case 2:

Enter number of hours:

34

Enter hourly pay rate:

6

computePay1(): 204.00

computePay2(): 204.00

(3) Test Case 3:

Enter number of hours:

156

Enter hourly pay rate:

8

computePay1(): 1248.00

computePay2(): 1248.00

```
double computePay1(int noOfHours, int payRate)
{
    int pay = 0;

    if(noOfHours<=160)
    {
        pay= noOfHours*payRate;
    }
    else if(noOfHours>160)
    {
        pay = 160*payRate+1.5*payRate*
(noOfHours-160);
    }

    return pay;
}

void computePay2(int noOfHours, int payRate,
double *grossPay)
{
    int pay = 0;

    if(noOfHours<=160)
    {
        pay= noOfHours*payRate;
    }
    else if(noOfHours>160)
    {
        pay = 160*payRate+1.5*payRate*
(noOfHours-160);
    }
    *grossPay = pay;
}
```