



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING

SECJ 1013

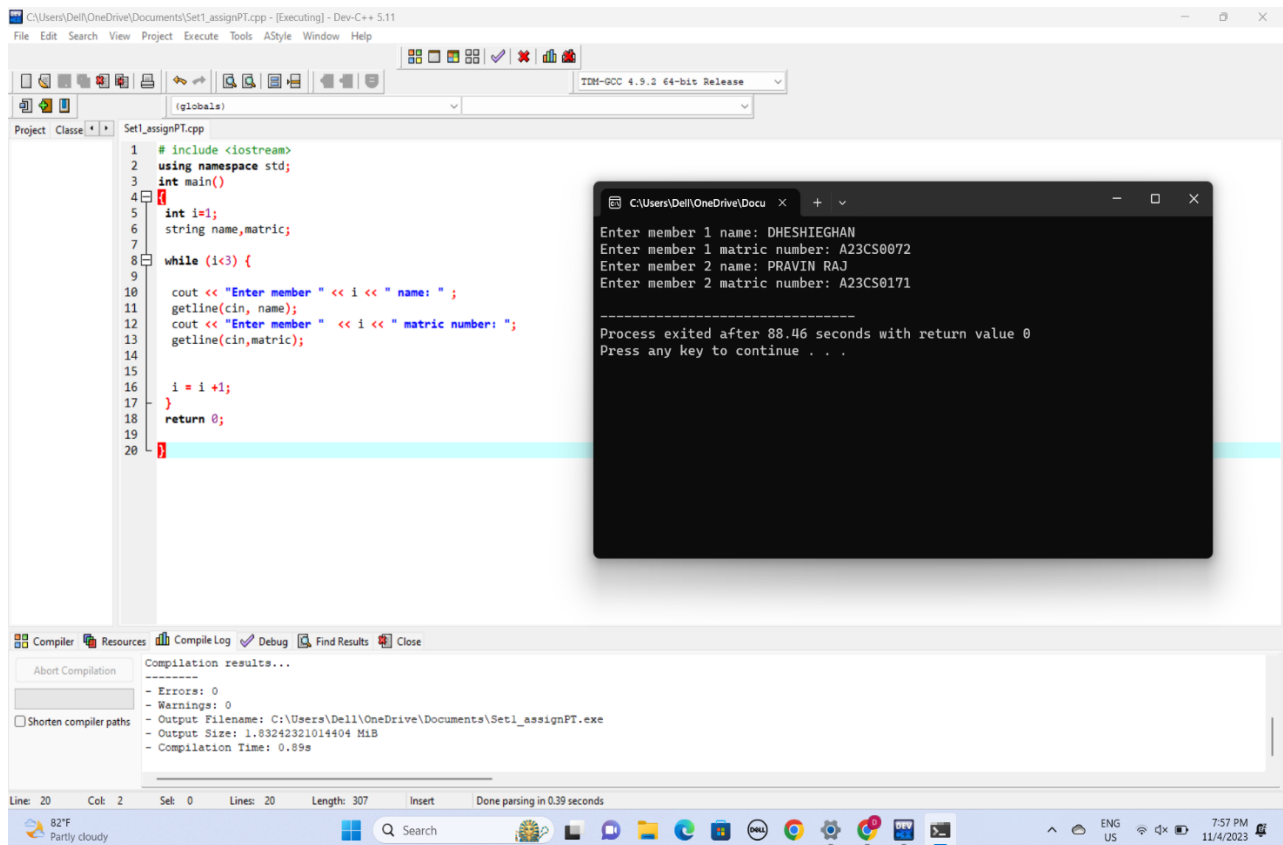
PROGRAMMING TECHNIQUE 1

ASSIGNMENT 1

LECTURER'S NAME : DR NIES HUI WEN

BIL	GROUP MEMBERS	MATRICS NUMBER
1	DHESHIEGHAN A/L SARAVANA MOORTHY	A23CS0072
2	PRAVINRAJ A/L SIVABATHI	A23CS0171

SET 1



C++ CODE

```
# include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{    int i=1;
```

```
    string name,matric;
```

```
    while (i<3) {
```

```
        cout << "Enter member " << i << " name: " ;
```

```
        getline(cin, name);
```

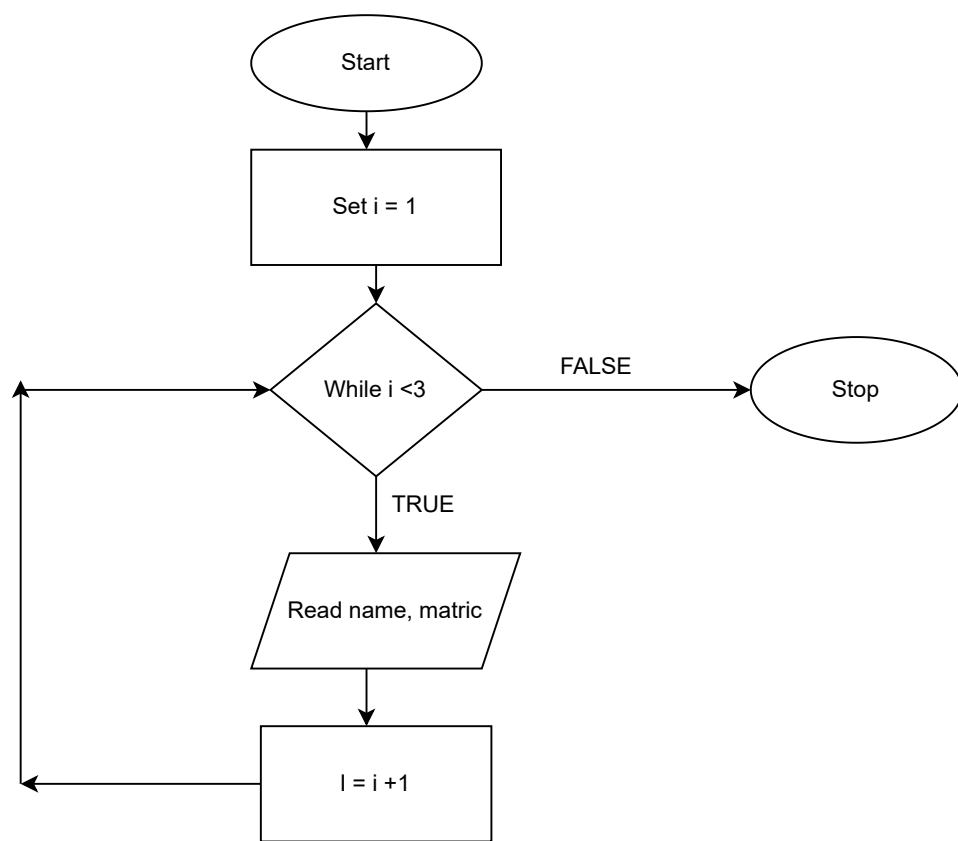
```
        cout << "Enter member " << i << " matric number: ";
```

```
        getline(cin,matric);
```

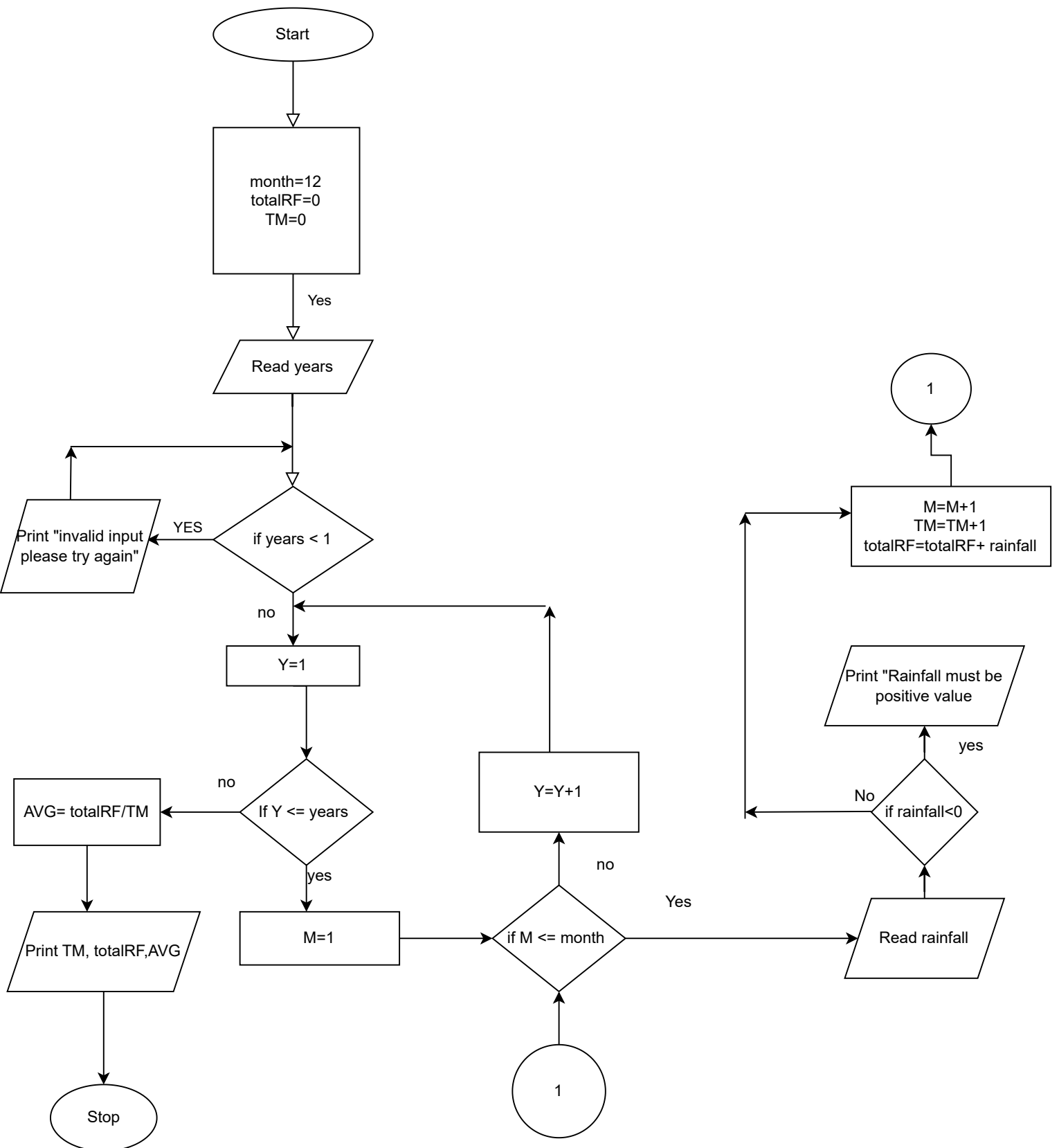
```
        i = i +1; }
```

```
    return 0;
```

```
}
```



SET 2



SET 3

Line	Corrected Statements
2	using namespace std;
5	for(int j = i; j>0 ;j-=5)
6	if((i+j)%4 !=0)
8	else{
9	cout<<"j = " << --j <<end1;}
10	cout << "i=" <<i<<end1;}
12	i/=2;
14	return 0;}

SET 4

The screenshot shows a C++ IDE with the source code for 'assignment set3.cpp'. The code defines a program that takes quantity and level as input and calculates a price based on several conditions. Five terminal windows are overlaid, showing the program's output for different input values.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     double price = 0;
6     int quant;
7     string level;
8
9     cout << "Enter the quantity and level: ";
10    cin >> quant;
11    cin >> level;
12
13    if (level == "low") {
14        if ((quant >= 0) && (quant < 15)) {
15            price = quant * 0.3;
16        }
17        else if ((quant >= 15) && (quant <= 50)) {
18            price = quant * 0.5;
19        }
20        else if (quant >= 51) {
21            price = quant * 0.7;
22        }
23    }
24    else {
25        if ((quant > 0) && (quant <= 10)) {
26            price = quant * 0.2;
27        }
28        else if ((quant > 10) && (quant <= 20)) {
29            price = quant * 0.3;
30        }
31        else if (quant >= 20) {
32            price = quant * 0.6;
33        }
34    }
35    cout << "price: RM " << price;
36}
```

Terminal 1: Enter the quantity and level: 11 22
price: RM 3.3
Process exited after 15.33 seconds with return value 0
Press any key to continue . . .

Terminal 2: Enter the quantity and level: 16 33
price: RM 4.8
Process exited after 6.718 seconds with return value 0
Press any key to continue . . .

Terminal 3: Enter the quantity and level: 20 12
price: RM 6
Process exited after 12.84 seconds with return value 0
Press any key to continue . . .

Terminal 4: Enter the quantity and level: 25 18
price: RM 15
Process exited after 7.494 seconds with return value 0
Press any key to continue . . .

Terminal 5: Enter the quantity and level: 8 10
price: RM 1.6
Process exited after 4.438 seconds with return value 0
Press any key to continue . . .

This screenshot is similar to the first one, but with line 34 of the source code highlighted in blue. The terminal windows show the same execution results as in the first screenshot.

```
13 if (level == "low") {
14     if ((quant >= 0) && (quant < 15)) {
15         price = quant * 0.3;
16     }
17     else if ((quant >= 15) && (quant <= 50)) {
18         price = quant * 0.5;
19     }
20     else if (quant >= 51) {
21         price = quant * 0.7;
22     }
23 }
24 else {
25     if ((quant > 0) && (quant <= 10)) {
26         price = quant * 0.2;
27     }
28     else if ((quant > 10) && (quant <= 20)) {
29         price = quant * 0.3;
30     }
31     else if (quant >= 20) {
32         price = quant * 0.6;
33     }
34 }
35 cout << "price: RM " << price;
36 }
```

Terminal 1: Enter the quantity and level: 11 22
price: RM 3.3
Process exited after 15.33 seconds with return value 0
Press any key to continue . . .

Terminal 2: Enter the quantity and level: 16 33
price: RM 4.8
Process exited after 6.718 seconds with return value 0
Press any key to continue . . .

Terminal 3: Enter the quantity and level: 20 12
price: RM 6
Process exited after 12.84 seconds with return value 0
Press any key to continue . . .

Terminal 4: Enter the quantity and level: 25 18
price: RM 15
Process exited after 7.494 seconds with return value 0
Press any key to continue . . .

Terminal 5: Enter the quantity and level: 8 10
price: RM 1.6
Process exited after 4.438 seconds with return value 0
Press any key to continue . . .

C++ CODE

```
#include <iostream>

using namespace std;

int main(){

    double price = 0;

    int quant;

    string level;

    cout << "Enter the quantity and level: " ;

    cin >> quant;

    cin >> level;

    if (level == "low"){

        if ((quant>=0) && (quant < 15)) {

            price = quant * 0.3;

        }

        else if ((quant>=15) && (quant <=50)) {

            price = quant * 0.5;

        }

        else if (quant>=51) {

            price = quant * 0.7;

        }

    }
```

```
}  
  
else {  
    if ((quant>0) && (quant <= 10)) {  
        price = quant * 0.2;  
    }  
    else if ((quant>10) && (quant <= 20)) {  
  
        price = quant * 0.3;  
    }  
    else if (quant>=20) {  
  
        price = quant * 0.6;  
    }  
  
}  
  
cout << "price: RM " << price;  
  
}
```