



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

# **(SECJ1013) PROGRAMMING TECHNIQUE 1**

## **ASSIGNMENT 1**

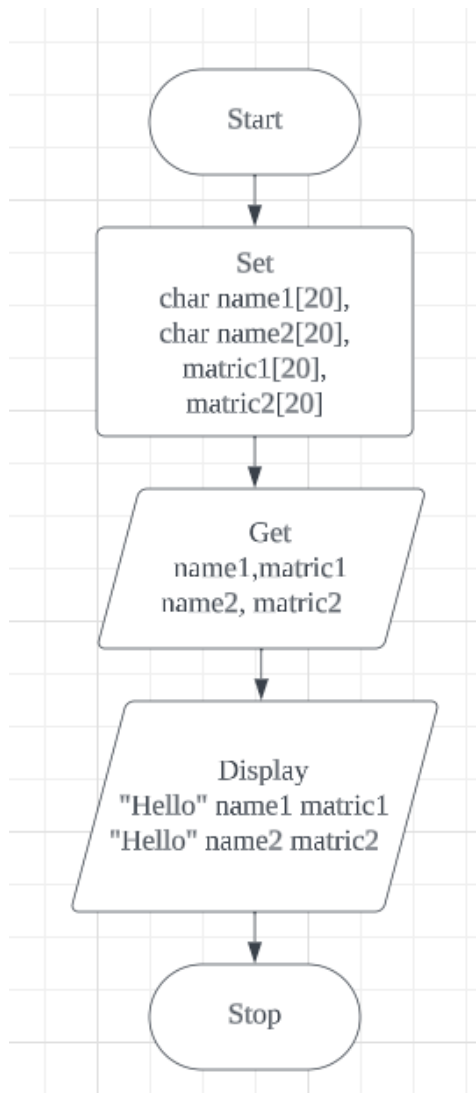
### **SECTION 3**

#### **BACHELOR OF COMPUTER SCIENCE**

#### **(DATA ENGINEERING)**

<b>Name</b>	<b>Matric Number</b>
<b>LEE YIN SHEN</b>	<b>A23CS0236</b>
<b>NEO LI XIN</b>	<b>A23CS0253</b>

# SET 1



```
1  #include<iostream>
2  using namespace std;
3
4  int main(){
5
6      char name1[20], name2[20], matric1[20], matric2[20] ;
7
8      cout << "Enter member 1 name: " ;
9      cin.getline(name1, 20) ;
10
11     cout << "Enter member 1 matric number: " ;
12     cin.getline(matric1, 20) ;
13
14     cout << "Enter member 2 name: " ;
15     cin.getline(name2, 20) ;
16
17     cout << "Enter member 2 matric number: " ;
18     cin.getline(matric2, 20) ;
19
20     cout << "\nHello " << name1 << " " << matric1 << endl ;
21
22     cout << "\nHello " << name2 << " " << matric2 << endl ;
23
24     return 0 ;
25
26 }
```

D:\Documents\YEAR 1\C... — □ ×

Enter member 1 name: LEE YIN SHEN  
Enter member 1 matric number: A23CS0236  
Enter member 2 name: NEO LI XIN  
Enter member 2 matric number: A23CS0253

Hello LEE YIN SHEN A23CS0236  
Hello NEO LI XIN A23CS0253

-----  
Process exited after 81.03 seconds with return value 0  
Press any key to continue . . .

## SET 2

i)  $\text{years} < 1$

ii)  $Y \leq \text{years}$

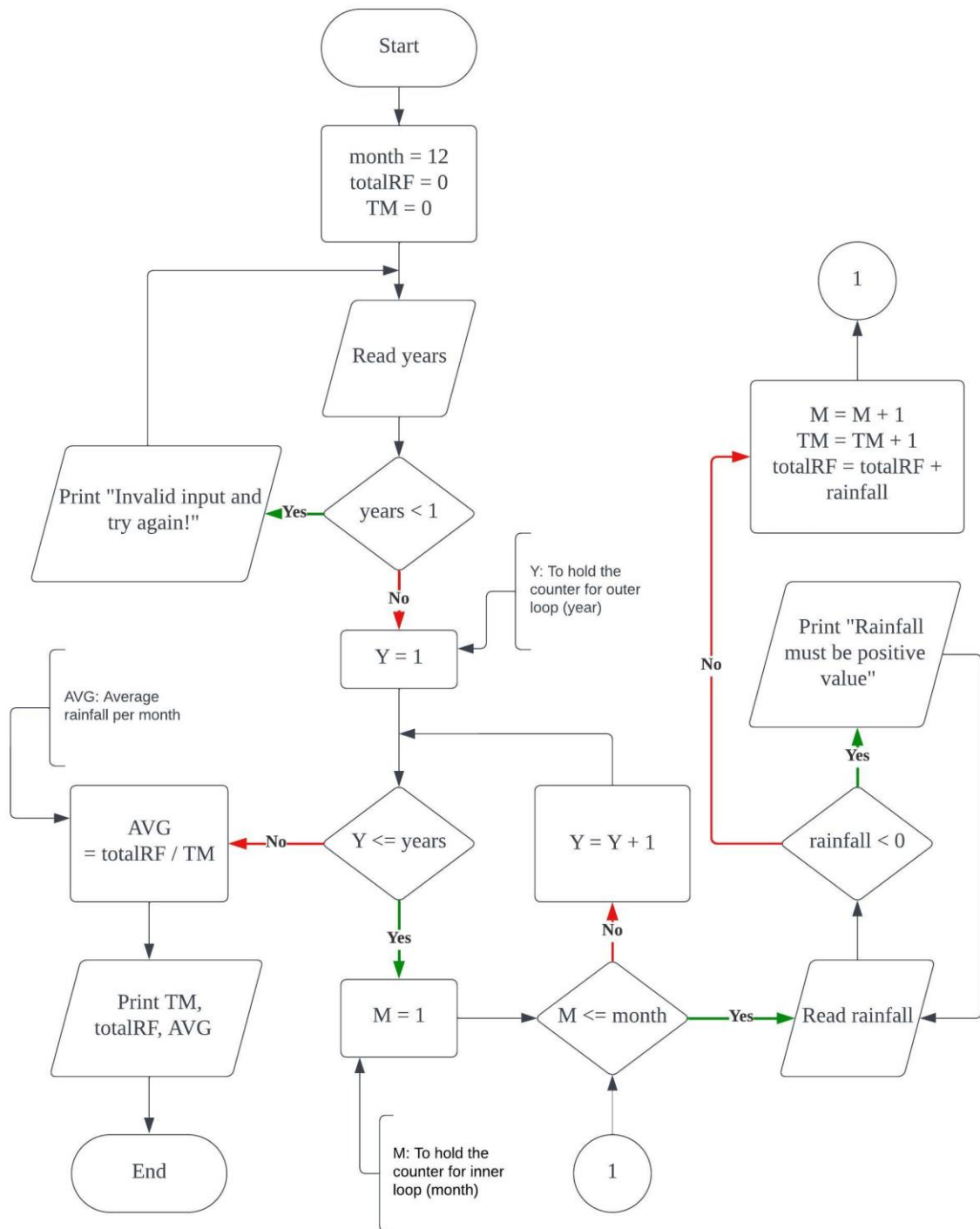
iii)  $\text{totalRF} / \text{TM}$

iv)  $M \leq \text{month}$

v)  $Y = Y + 1$

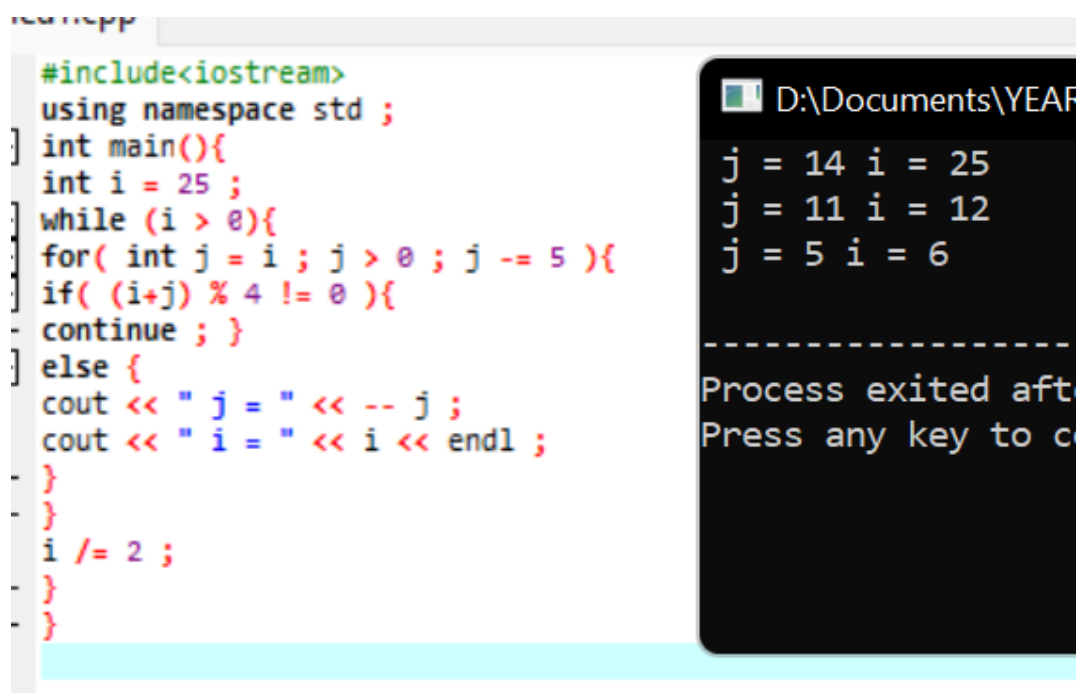
vi)  $\text{rainfall} < 0$

vii)  $\text{totalRF} = \text{totalRF} + \text{rainfall}$



## SET 3

1	#include<iostream>
2	using namespace std ;
3	int main(){
4	int i = 25 ;
5	while (i > 0){
6	for( int j = i ; j > 0 ; j -= 5 ){
7	if( (i+j) % 4 != 0 ){
8	continue ; }
9	else {
10	cout << " j = " << -- j ;
11	cout << " i = " << i << endl ;
12	}
13	}
14	i /= 2 ;
15	}
16	}



The image shows a screenshot of a C++ program being executed. On the left, the source code is displayed in a text editor with syntax highlighting. The code defines a main function that enters a while loop. Inside the while loop, there is a for loop that decrements 'j' by 5 until it is greater than 0. Within the for loop, an if statement checks if (i+j) % 4 is not equal to 0. If true, it continues the for loop. Otherwise, it prints the current value of 'j' (after decrementing) and 'i', then increments 'i' by 2. The while loop continues until 'i' is no longer greater than 0. On the right, a terminal window shows the output of the program. It displays three lines of output: 'j = 14 i = 25', 'j = 11 i = 12', and 'j = 5 i = 6'. Below the output, there is a dashed line followed by the text 'Process exited after' and 'Press any key to continue'.

```
#include<iostream>
using namespace std ;
int main(){
int i = 25 ;
while (i > 0){
for( int j = i ; j > 0 ; j -= 5 ){
if( (i+j) % 4 != 0 ){
continue ; }
else {
cout << " j = " << -- j ;
cout << " i = " << i << endl ;
}
}
i /= 2 ;
}
}
```

D:\Documents\YEAR

j = 14 i = 25  
j = 11 i = 12  
j = 5 i = 6

-----  
Process exited after  
Press any key to c

## SET 4

```
4 int main(){
5
6     int quantity ;
7     double price = 0 ;
8     string level ;
9
10    cout << "Enter the quantity and level: " ;
11    cin >> quantity >> level ;
12
13    if( level == "Low" ){
14
15        if( quantity >= 0 && quantity < 15 ){
16            price = quantity * 0.3 ;
17        }
18
19        else if( quantity >= 15 && quantity <= 50 ){
20            price = quantity * 0.5 ;
21        }
22
23        else{
24            price = quantity * 0.7 ;
25        }
26
27    }
28
29    else{
30
31        if( quantity > 0 && quantity <= 10 ){
32            price = quantity * 0.2 ;
33        }
34
35        else if( quantity > 0 && quantity <= 20 ){
36            price = quantity * 0.3 ;
37        }
38
39        else{
40            price = quantity * 0.6 ;
41        }
42    }
```

Three terminal windows showing the program's execution:

```
D:\Documents\YEAR 1\CPP\Untitled...
Enter the quantity and level: 51 Low
Price: RM35.7

D:\Documents\YEAR 1\CPP\Untitled1...
Enter the quantity and level: 0 Medium
Price: RM0

D:\Documents\YEAR 1\CPP\Untitle...
Enter the quantity and level: 20 High
Price: RM6

-----
Process exited after 1.629 seconds with return
value 0
Press any key to continue . . .
```