

PT1 ASSIGNMENT 2

BY

- MAHMOUD KHALED A20EC0271
- HASAN ADITTYA A20EC4023
- MD MASQURUL HASAN A20EC4031

SECTION A

1.

Answer: FALSE

Reason: There is no break after the second case so if case 2 is entered the output will be 2.9

2.

Answer: FALSE

Reason: It will produce the following output: 0 0 0 0

This is because the inner and outer loops are repeated twice. Also, the number 0 is displayed here since x and y are both integers so they can't display a decimal number.

3.

Answer: FALSE

Reason: The correct function to be in this statement is exit().

4.

Answer: TRUE

Reason: Since a is a static its value doesn't change between function calls.

SECTION B

1a

```
#include<iostream>

using namespace std;

int main ()
{
    char x = 'n';

    cout<<"Enter 'y' or non-'y': "<< endl;

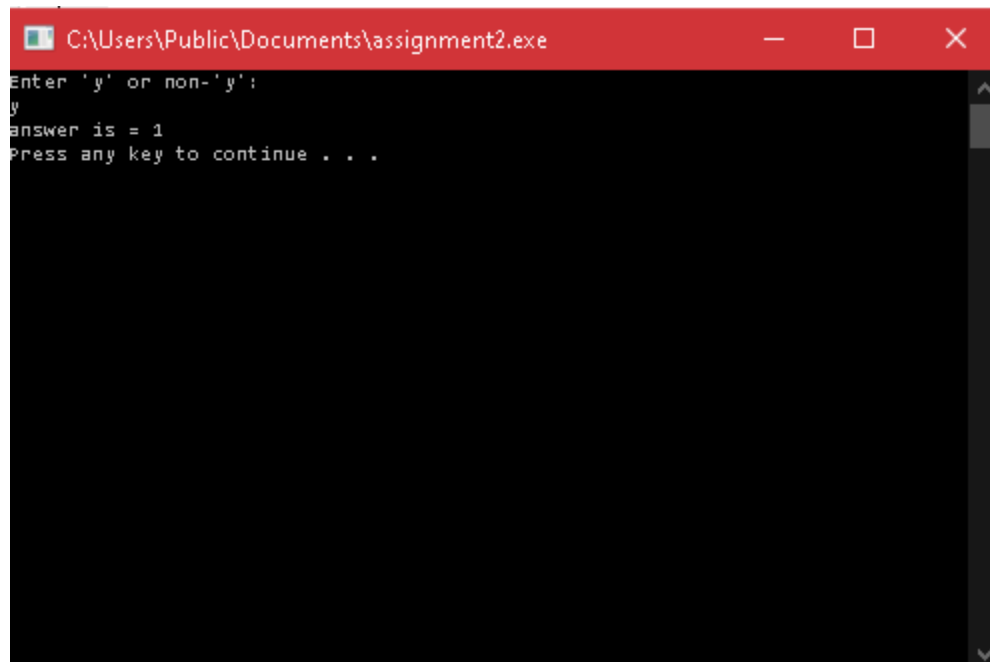
    cin>> x;

    x=='y'? cout<<"answer is = "<<1 : cout<<"answer is = "<<0;

    cout<<endl;

    system("pause");

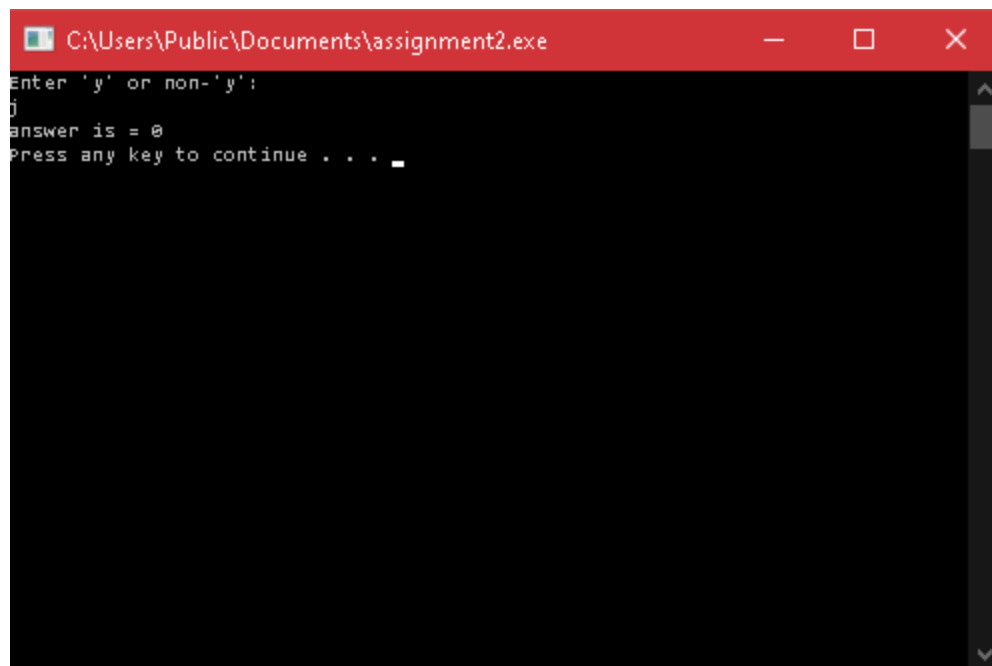
    return 0;
}
```



The screenshot shows a Windows command prompt window titled "C:\Users\Public\Documents\assignment2.exe". The window has a black background with white text. The text displayed is as follows:

```
Enter 'y' or non-'y':
y
answer is = 1
Press any key to continue . . .
```

The user has entered 'y' at the prompt, and the program has output "answer is = 1". The window is currently paused, waiting for a key press to continue.



1b

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    cout << "Enter your transaction code. d - deposit, w - withdrawal:\n";
```

```
    char c ;
```

```
    cin >> c;
```

```
    int balance = 300, amount;
```

```
    switch(c)
```

```
    {
```

```
        case 'd': cout << "Enter amount RM";
```

```
        cin >> amount;
```

```
        balance += amount;
```

```

        cout << "Your current balance is now RM " << balance;

        break;

        case 'w': cout << "Enter amount in RM";

cin >> amount;

        balance -= amount;

        cout << "Your current balance is now RM " << balance;

        break;

        default: cout << "Code is not allowed, you must Try again.";

    }

    return 0;

}

```



2ai

```

#include<iostream>

using namespace std;

int main()

```

```

{
    int a, x =0;

    cout<<" please enter a number ";

    cin>> a;

    switch (a)
    {
        case 1 : x++; break;

        case 2 : x++; break;

        case 3 : x--; break;

        case 4 : x--; break;

        default : x+=2; break;

    }

    cout<<x<<endl; system ("PAUSE");

    return 0;

}

```

2a11

```

#include<iostream>

using namespace std;

int main()

{

    int a, x =0;

    cout<<" please enter a number ";

    cin>> a;

    do { switch (a)

```

```

{
    case 1 : x++; break;

    case 2 : x++; break;

    case 3 : x--; break;

    case 4 : x--; break;

    default : x+=2; break;
}

cout<<x<<endl;

} while (a<0 && a>4);

system ("PAUSE");

return 0;
}

```

3a

```

#include <iostream>

using namespace std;

void userInput(int &numDaysSpent,float &dailyRoomRate, float &medicationCharges,float
&serviceCharges)

{

    cout<<"Enter number of days spent: ";

    cin>>numDaysSpent;

    cout<<"Enter Daily room rate: ";

    cin>>dailyRoomRate;

    cout<<"Enter medication charges: ";

    cin>>medicationCharges;

    cout<<"Enter service charges: ";

    cin>>serviceCharges;
}

```

```

}

int main ()
{
    int numDaysSpent;

    float dailyRoomRate,medicationCharges,serviceCharges;

    userInput(numDaysSpent, dailyRoomRate,medicationCharges,serviceCharges);

    cout<<"The details are as follows: "<<endl;

    cout<<"Number of days Spent: "<<numDaysSpent<<endl;

    cout<<"Daily room rate: "<<dailyRoomRate<<endl;

    cout<<"Medication Charges: "<<medicationCharges<<endl;

    cout<<"Service Charges: "<<serviceCharges<<endl;

    return 0;
}

```

3b

```

#include <iostream>

using namespace std;

string patient_type;

float totalCharges(int days, float room_rate, float medication_charges, float service_charges);

float totalCharges(float medication_charges, float service_charges);

int main ()
{
    float inpatient_totalCharges = totalCharges(3,200,450.7,20.5);

    float outpatient_totalCharges = totalCharges(410.75,50);

    cout << "TotalCharges for inpatient: " << inpatient_totalCharges << endl;
}

```

```

cout << "TotalCharges for outpatient: " << outpatient_totalCharges << endl;

return 0;

}

float totalCharges(int days, float room_rate, float medication_charges, float service_charges)
{
float total_charges = days * room_rate + medication_charges + service_charges; return total_charges;
}

float totalCharges(float medication_charges, float service_charges)
{
float total_charges = medication_charges + service_charges;
return total_charges;
}

```

4a

OUTPUT:

3

4b

OUTPUT:

14
12 14 0
14 15 -1
16 15 -1
14 15 -1

4ci

```

#include<iostream>

#include<iomanip>

using namespace std;

int input();

```



```
int totalDay(int);

double calcAvg(int, int);

int main()
{
    int x;

    double avg;

    x = input();

    avg = calcAvg(x, totalDay(x));

    cout << fixed << showpoint << setprecision(2);

    cout << "The average number of days absent: ";

    cout << avg;

    return 0;
}

int input()
{
    int x;

    cout << "Enter the number of employees: ";

    cin >> x;

    return x;
}

int totalDay(int x)
{
    int total = 0;

    for (int i = 0; i < x; i++)
    {
```

```
int days;

cout << "Number of days Employee #" << (i + 1) << " was absent: ";

cin >> days;

total += days;

}

return total;

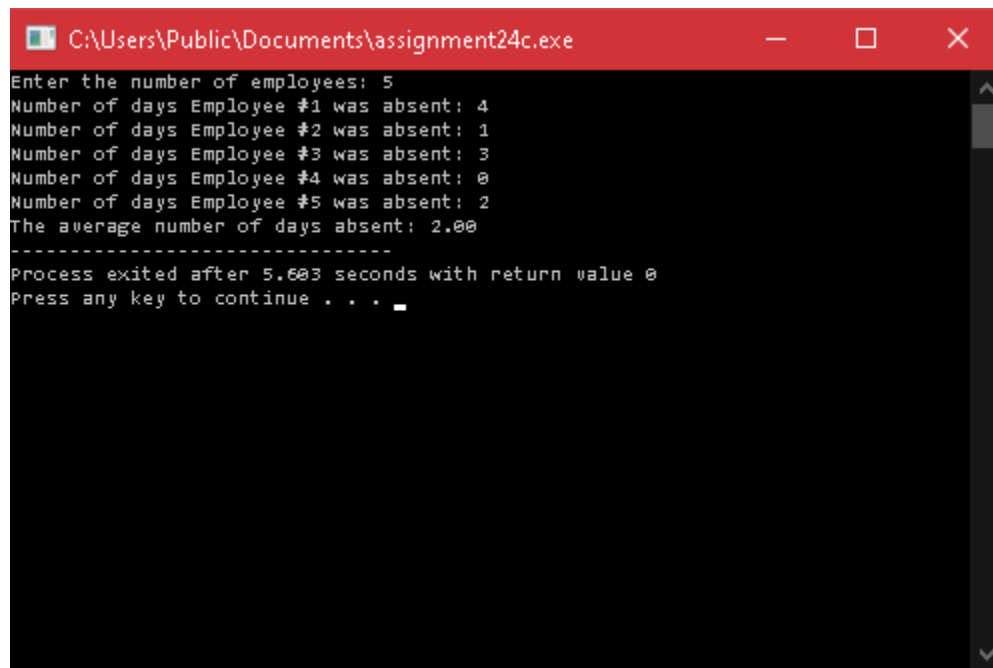
}

double calcAvg(int x, int days)

{

return((double)days / (double)x);

}
```



```
C:\Users\Public\Documents\assignment24c.exe
Enter the number of employees: 5
Number of days Employee #1 was absent: 4
Number of days Employee #2 was absent: 1
Number of days Employee #3 was absent: 3
Number of days Employee #4 was absent: 0
Number of days Employee #5 was absent: 2
The average number of days absent: 2.00
-----
Process exited after 5.603 seconds with return value 0
Press any key to continue . . .
```