

Benha University

Faculty of Engineering at Shoubra

Electronics & Communications Department



Quiz (2) solution

(Q1). What is the value of the variable Grade?

```
int x = 4 ;  
  
switch (x) {  
  
case 1: Grade = 'A'; break;  
  
case 2: Grade = 'B'; break;  
  
case 4: Grade = 'C';  
  
default: Grade = 'F';  
  
}
```

Answer:when the above program is compiled & executed the value of the variable Grade will be 'F';

Because the program starts executing case 4 (because $x = 4$) it sets Grade to 'C' but it doesn't stop because there is no break statement so it continues executing default case setting Grade to the value 'F'.

(Q2). A club wants you to write a program to calculate the yearly dues for its members. The program should prompt the user for the membership type (either 'I' for individual, or 'F' for family) and the number of years the person has been a member. Calculate the dues as follows: If the person is a family member and has been a club member for more than three years, the dues are \$2400.00. If the person is a family member and has been a club member for three years or less, the dues are \$3000.00. If the person is an individual member and has been a club member for more than five years, the dues are \$1500.00. If the person is an individual member and has been a club member for five years or less, the dues are \$1900.00.

```
#include <iostream>  
  
using namespace std;  
  
int main()  
  
{
```

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Quiz (2) solution

```
char MembersType;

int years;

float dues;

cout<<"Enter your Membership Type :\n ";

cin>>MembersType;

cout<<"Enter your Member ship duration (IN YEARS):\n";

cin>>years;

if (MembersType=='F' && years>3)

    dues=2400.00;

else if (MembersType=='F' && years<=3)

    dues=3000.00;

else if (MembersType=='T' && years>5)

    dues=1500.00;

else if (MembersType=='T' && years<=5)

    dues=1900.00;

cout<<"Yearly Dues are: "<<dues<<"$";

return 0;

}
```