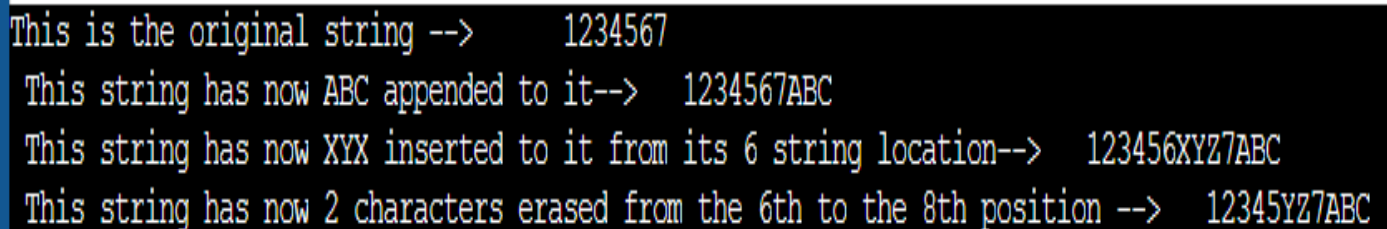


MAC101 simulation of the final exam.

1. The following program has the output below.

```
#include <iostream>
#include <string>
using namespace std;
int main ( ) {
string s1 = "1234567" ;
cout << "This is the original string --> " << s1 << endl ;
s1.append ("ABC" ) ;
cout << " This string has now ABC appended to it--> " << s1 << endl ;
s1.insert (6,"XYZ") ;
cout << " This string has now XYX inserted to it from its 6 string location--> " << s1 << endl ;
s1.erase (5,2 ) ;
cout << " This string has now 2 characters erased from the 6th to the 8th position --> " << s1 << endl ;
return(0) ;
}
```



```
This is the original string --> 1234567
This string has now ABC appended to it--> 1234567ABC
This string has now XYX inserted to it from its 6 string location--> 123456XYZ7ABC
This string has now 2 characters erased from the 6th to the 8th position --> 12345YZ7ABC
```

Study the program above and based on it, write a program that prints the shape below using cout command, loop and string manipulation commands.

```
*****
*****
*****
*****
*****
*****
*****
****
***
**
*
```

2. For the following program write the exact output on that will be shown on the screen

```
#include <iostream>
using namespace std ;

int main ( )
{
int x = 9 , y = 4 ;
  cout << x / y << endl ;
  cout << x % y << endl ;
  cout << x << ++y << endl ;
  cout << x << "\t" << y << endl ;

return 0 ;
}
```

Code Tracing/Debugging Sample

Please write exact output here: