

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
class word {
```

```
public:
```

```
    string name, newname, replacestring;
```

```
    char c;
```

```
    int j = 0, i = 0, count = 0, sposition = 0, length = 0, check = 0;
```

```
    void getdata() {
```

```
        std::cout << "Enter the string: ";
```

```
        cin >> name;
```

```
    }
```

```
void frequency()
```

```
{
```

```
    std::cout << "Enter the Character you want to check: ";
```

```
    cin >> c;
```

```
    while (name[i] != '\0')
```

```
    {
```

```
        if (name[i] == c)
```

```
        {
```

```
            count++;
```

```
        }
```

```
        i++;
```

```
    }
```

```
    std::cout << "Frequency of " << c << " is " << count << endl;
```

```
}
```

```
void position()
{
    std::cout << "Enter the starting position: ";

    cin >> sposition;

    std::cout << "Enter the length: ";

    cin >> length;

    for (i = (sposition - 1); i < sposition - 1 + length; i++)
    {
        std::cout << name[i];
    }

    std::cout << endl;
}
```

```
void remove() {  
    std::cout << "Enter the character you want to remove: ";  
    cin >> c;  
    i = 0;  
    while (name[i] != '\0') {  
        if (name[i] != c) {  
            std::cout << name[i];  
        }  
        i++;  
    }  
    std::cout << endl;  
}
```

```
void palindrome()
{
    while (name[i] != '\0')
    {
        length++;
        i++;
    }
    for (i = (length - 1); i >= 0; i--) {
        newname[j] = name[i];
        j++;
    }
    i = 0;
    while (i < length) {
        if (newname[i] != name[i]) {
            check = 1;
        }
        i++;
    }
    if (check == 1) {
        std::cout << name << " is Not a palindrome.\n";
    } else
```

```
std::cout << name << " is a palindrome.\n";  
}
```

```
void replace() {  
    string w, x;  
  
    std::cout << "Enter the substring to replace: ";  
    cin >> w;  
    std::cout << "Enter the replacement string: ";  
    cin >> x;  
  
    size_t found = name.find(w);  
    if (found != string::npos) {  
        name.replace(found, w.length(), x);  
        std::cout << "String after replacement: " << name << endl;  
    } else {  
        std::cout << "Substring not found in the original string."  
<< endl;  
    }  
}  
};
```

```
int main() {  
  
    word w;  
  
    int op, r;  
  
    do {  
  
        std::cout << "Please Select the operation\n";  
  
        std::cout << "1. Add the String\n2. Determine the  
frequency\n3. New string from original string by starting  
position and length\n4. Remove character from string\n5.  
Palindrome\n6. Replace substring\n7. Exit\n";  
  
        cin >> op;  
  
        switch (op) {  
  
            case 1:  
  
                w.getdata();  
  
                break;  
  
  
            case 2:  
  
                w.frequency();  
  
                break;  
  
  
            case 3:
```


w.position();

break;

case 4:

w.remove();

break;

case 5:

w.palindrome();

break;

case 6:

w.replace();

break;

case 7:

exit(0);

break;

default:

```
std::cout << "Please Enter the correct choice" << endl;
```

```
break;
```

```
}
```

```
std::cout << "For Continue Press 1 (Yes) 2 (No): ";
```

```
cin >> r;
```

```
} while (r == 1);
```

```
return 0;
```

```
}
```