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**Section C**

**Lab manual 4(Lab Task)**

**Q#1**

```
#include<iostream>

using namespace std;

int main()

{

int x = 1;

do {

    cout << "enter a number: ";

    cin >> x;

} while (x > 0);

    return 0;

}
```

**Q#2**

```
#include <iostream>

#include<math.h>

using namespace std;
```

```
int main() {  
  
    int num1, num2 ;  
  
    float result;  
  
    char a,operation;  
  
    do {  
  
        cout << "Enter the first number: ";  
  
        cin >> num1;  
  
        cout << "Enter the second number: ";  
  
        cin >> num2;  
  
        cout << "Choose an operation: " << endl;  
  
        cout << "+" << endl;  
  
        cout << "-" << endl;  
  
        cout << "*" << endl;  
  
        cout << "/" << endl;  
  
        cout << "%" << endl;  
  
        cin >> operation;  
  
        switch (operation) {  
  
            case '+':  
  
                result = num1 + num2;  
  
                cout << "The result is: " << result << endl;  
  
                break;  
  
            case '-':  
  
                result = num1 - num2;  
  
                cout << "The result is: " << result << endl;  

```

```

        break;
    case '*':
        result = num1 * num2;
        cout << "The result is: " << result << endl;
        break;
    case '/':
        result = num1 / num2;
        cout << "The result is: " << result << endl;
        break;
    case '%':
        result = fmod(num1,num2);
        cout << "The result is: " << result << endl;
    default:
        cout << "Invalid operation" << endl;
}
cout << "Do you want to use calculator again?" << endl;
cout << "Enter '1' for or yes or enter '0' for no" << endl;
cin >> a;
} while (a=1);
cout << "Thank you for using the calculator!" << endl;
return 0;
}

```

**Q#3**

**(a)**

```
#include<iostream>

using namespace std;

int main()
{
    int a,b,c;

    b=0;

    for(a=2;a<=100;a=a+2)
    {
        c=a+b;

        b=c;
    }

    cout<<c<<endl;

    return 0;
}
```

**Q#3**

**(b)**

```
#include<iostream>

using namespace std;

int main()
{
    int a=1,b,d=0;

    while(a<=100)
```

```
{  
    b=a*a;  
    d=d+b;  
    a++;  
}  
cout<<d<<endl;  
return 0;  
}
```

## Q#4

(a)

```
#include <iostream>  
  
using namespace std;  
  
int main() {  
    int a = 0, b = 2, p;  
    while (a <= 20) {  
        p = 1;
```

```

for (int i = 0; i < a; i++) {

    p=p*b;

}

cout << p << endl;

a++;

}

return 0;

}

```

## Q#4

(b)

```

#include <iostream>

using namespace std;

int main() {

    int a, b,c = 0;

    cout << "Enter any two numbers: "<<endl;

    cin >> a >> b;

    for (int i = a; i <= b; i++) {

        if (i % 2 != 0) {

            c=c+i;

        }

    }

    cout << "The sum of all odd numbers between a and b is: " << c<< endl;

```

```
return 0;
```

```
}
```