

(globals)

num 1 task.cpp

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  { int i;
5    for(i=2;i<=20;i+=3)
6    {cout<<i<<" ";|
7    }return 0;
8  }
```

C:\Users\hp\Documents\num x

2 5 8 11 14 17 20

-----  
Process exited after 0.1455 seconds with return code 0  
Press any key to continue . . . |

Task 1

```

1  #include <iostream>
2  #include <string>
3  using namespace std;
4  int main() {
5
6      const string password = "mahnoor";
7      const int maxAttempts = 3;
8      string input;
9      int attempts = 0;
10 do {
11     cout << "Enter password: ";
12     cin >> input;
13     attempts++;
14     if (input == password) {
15         cout << "Password correct.\n";
16     }
17     else if (attempts == maxAttempts) {
18         cout << "Maximum attempts reached.\n";
19     }
20     else {
21         cout << "Password incorrect.\n";
22     }
23     } while (input != password && attempts < maxAttempts);
24     return 0;
25 }

```

Enter password: mahnoor  
Password correct.

-----  
Process exited after 3.852 seconds with return va  
Press any key to continue . . . |

Task 2



```
(globals)
num 2.cpp  [*] Untitled2  [*] Untitled3  task numb 2.cpp  [*] task numb 3.cpp

#include <iostream>
using namespace std;
int main() {
    int secretNumber = 5;
    int Guess;
    int attempts = 0;

    cout << "Guess the secret number" << endl;
    while (true) {
        cout << "Enter your guess: ";
        cin >> Guess;
        attempts++;
        if (Guess == secretNumber)
            {cout << "You found the secret number in " << attempts << " attempts" << endl;
             break;}
        else if (Guess < secretNumber)
            {cout << "low" << endl; }
        else
            { cout << "high" << endl;}
    }
    return 0;
}
```

```
C:\Users\hp\Documents\task  X  +  v

Guess the secret number
Enter your guess: 3
low
Enter your guess: 5
You found the secret number in 2 attempts

-----
Process exited after 11.86 seconds with return value 0
Press any key to continue . . . |

Task 3
```

```

#include <iostream>
using namespace std;
int main()
{ int choice;
do { cout << "\nMenu\n";
      cout << "1. Print Hello\n";
      cout << "2. Print World\n";
      cout << "3. Exit\n";
      cout << "Enter your choice: ";
      cin >> choice;
      switch (choice) {
          case 1:
              cout << "Hello" << endl;
              break;
          case 2:
              cout << "World" << endl;
              break;
          case 3:
              cout << "Exiting program. Bye" << endl;
              break;
          default:
              cout << "Invalid choice." << endl;
      }
      } while (choice != 3);
      return 0;
}

```

Menu

1. Print Hello
2. Print World
3. Exit

Enter your choice: 1  
Hello

Task 4

Menu

1. Print Hello
2. Print World
3. Exit

Enter your choice: 2  
World

Menu

1. Print Hello
2. Print World
3. Exit

Enter your choice: 3  
Exiting program. Bye



```
#include <iostream>
using namespace std;
int main() {
    int n;
    cout << "Enter a non-negative integer: ";
    cin >> n;

    if (n < 0)
        {cout << "Error: Input should be non-negative."; }
    else {
        int sumLoop = 0;
        for (int i = 1; i <= n; i++)
            { sumLoop += i * i;
            }

        int sumFormula = (n * (n + 1) * (2 * n + 1)) / 6;

        cout << "Sum of squares using loop: " << sumLoop << endl;
    }

    return 0;
}
```



C:\Users\hp\Documents\the t X



Enter a non-negative integer: 3  
Sum of squares using loop: 14

---

Process exited after 3.83 seconds with return v  
Press any key to continue . . .

Task 5