#### TP3 EX1 sonia

### Question 1

```
#include <iostream>
using namespace std;
class Animal {
public:
   void eat() {
       cout << "Animal is eating." << endl;</pre>
   void play() {
       cout << "Animal is playing." << endl;</pre>
};
class Cat : public Animal {
public:
   void meow() {
       cout << "Cat says: Meow." << endl;</pre>
};
class Dog : public Animal {
public:
    void bark() {
       cout << "Dog says: waf." << endl;</pre>
};
int main() {
   Cat cat;
    Dog dog;
    cat.play();
    cat.meow();
    dog.play();
    dog.bark();
```

## Question 2

```
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ g++ -Wall -Wextra -ansi -pedantic -o hello azizitetu2.cpp
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ ./hello
Animal is playing.
Cat says: Meow.
Animal is playing.
Dog says: waf.
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$
```

# Question 3

```
C: > Users > sonia > OneDrive > Desktop > ← main.cpp > ← main()
      #include <iostream>
      #include "animals.hpp"
      int main() {
         Cat cat;
         Dog dog;
         cat.play();
         cat.meow();
 10
 11
         dog.play();
         dog.bark();
 12
 13
 14
 15
 16
```

```
C: > Users > sonia > OneDrive > Desktop > C animals.hpp > ...
     # ifndef ANIMALS_HPP__
      # define ANIMALS_HPP___
     class Animal {
     public:
         void eat();
         void play();
      };
      class Cat : public Animal {
 10
      public:
 11
         void meow();
 12
 13
      };
 14
      class Dog : public Animal {
 15
      public:
 16
 17
         void bark();
 18
      };
 19
      #endif
 20
 21
```

```
    ⊕ animals.cpp ×

@ main.cpp
C: > Users > sonia > OneDrive > Desktop > G animals.cpp > ...
       #include <iostream>
       #include "animals.hpp"
       void Animal::eat() {
           std::cout << "Animal is eating" << std::endl;</pre>
       void Animal::play() {
           std::cout << "Animal is playing" << std::endl;</pre>
       }
 10
 11
       void Cat::meow() {
 12
           std::cout << "Cat says: Meow" << std::endl;</pre>
 13
 14
 15
 16
       void Dog::bark() {
           std::cout << "Dog says: Bark" << std::endl;</pre>
 17
 18
 19
 20
```

#### Question 4

```
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ g++ main.cpp animals.cpp -o main
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ ./main
Animal is playing
Cat says: Meow
Animal is playing
Dog says: Bark
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ []
```

#### **Question 5**

sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop\$ rm main

# Question 6

```
sonia1234@MSI:/mnt/c/Users/sonia/OneDrive/Desktop$ g++ -c main.cpp -o main.o
g++ -c animals.cpp -o animals.o
g++ main.o animals.o -o main
./main
Animal is playing
Cat says: Meow
Animal is playing
Dog says: Bark
```