**Отчет**

**по лабраторной работе №2**

# «Программирование»

# Вариант 2937

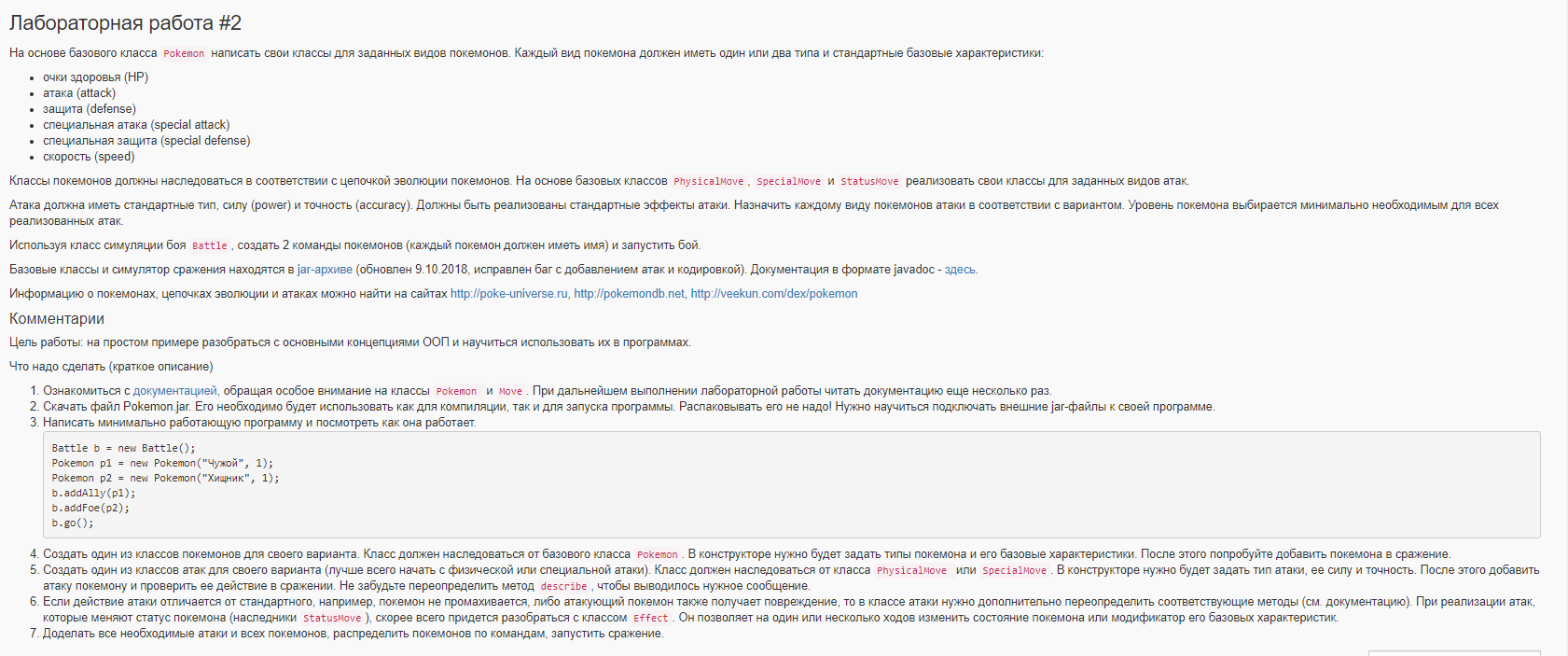
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Код:

Main:

package Lab2;

import ru.ifmo.se.pokemon.\*;

import mypokemon.\*;

public class lab2 {

// https://pokemondb.net/pokedex/sableye

// https://pokemondb.net/pokedex/teddiursa

// https://pokemondb.net/pokedex/ursaring

// https://pokemondb.net/pokedex/togepi

// https://pokemondb.net/search?q=Togetic

// https://pokemondb.net/pokedex/togekiss

public static void main(String [] args){

Battle b = new Battle();

Teddiursa p1 =new Teddiursa ("teddiursa", 100);

Togetic p2 = new Togetic("togetic", 100);

Sableye p3=new Sableye("sableye",100);

Togekiss p4=new Togekiss("togekiss",100);

Togepi p5=new Togepi("togepi",100);

Ursaring p6=new Ursaring("ursaring",100);

b.addAlly(p1);

b.addAlly(p2);

b.addAlly(p3);

b.addFoe(p4);

b.addFoe(p5);

b.addFoe(p6);

b.go();

}

public static boolean Chance(double d) {

if (d >= Math.random()) {

return true;

} else {

return false;

}

}

}

Skills:

1.

package move;

import ru.ifmo.se.pokemon.\*;

public class DoubleTeam extends StatusMove {

public DoubleTeam (double pow,double acc){

super(Type.NORMAL,pow,acc);

}

protected void applySelfEffects(Pokemon P){

super.applySelfEffects(P);

Effect raise = new Effect().stat(Stat.EVASION,1);

P.addEffect(raise);

}

protected String describe(){

String[] des=this.getClass().toString().split("\\.");

return "uses " + des[des.length-1];

}

}

2.

package move;

import ru.ifmo.se.pokemon.\*;

public class DreamEater extends SpecialMove {

public DreamEater (double pow,double acc){

super(Type.PSYCHIC,pow,acc);

}

int distingish;

int recovery;

protected void applyOppEffects (Pokemon O){

if (O.getCondition()==Status.SLEEP) {

distingish = 1;

}

else{

distingish = 0;

}

}

protected void applySelfEffects(Pokemon P) {

super.applySelfEffects(P);

if (distingish == 1) {

Effect gh = new Effect();

gh.stat(Stat.HP,(int)Math.round(P.getStat(Stat.HP)-P.getHP())/2);

P.addEffect(gh);

int recovery= (int)Math.round(P.getStat(Stat.HP)-P.getHP());

}

}

@Override

protected void applyOppDamage(Pokemon P, double dam) {

if (distingish==0)

{

super.applyOppDamage(P,0);

}else{

super.applyOppDamage(P,dam);

}

}

protected String describe(){

String[] des=this.getClass().toString().split("\\.");

return "uses " + des[des.length-1]+ " and HP+ "+recovery;

}

}

3.

package move;

import Lab2.lab2;

import ru.ifmo.se.pokemon.\*;

public class FlameThrower extends SpecialMove {

public FlameThrower (double pow,double acc){

super(Type.FIRE,pow,acc);

}

protected void applyOppEffects(Pokemon P){

super.applyOppEffects(P);

if (lab2.Chance(0.1)){

bur.burn(P);

}

}

protected String describe(){

String[] des =this.getClass().toString().split("\\.");

return "uses "+des[des.length-1];

}

}

4.

package move;

import ru.ifmo.se.pokemon.\*;

import javax.swing.plaf.BorderUIResource;

public class Leer extends StatusMove {

public Leer (double pow,double acc){

super(Type.NORMAL,pow,acc);

}

@Override

protected void applyOppEffects(Pokemon P) {

super.applySelfEffects(P);

Effect def = new Effect().stat(Stat.DEFENSE,-1);

}

protected String describe(){

String[] des=this.getClass().toString().split("\\.");

return "uses " + des[des.length-1];

}

}

5.

package move;

import ru.ifmo.se.pokemon.\*;

public class NastyPlot extends StatusMove {

public NastyPlot (double pow,double acc){

super(Type.DARK,pow,acc);

}

protected void applySelfEffects(Pokemon P){

super.applySelfEffects(P);

Effect raise =new Effect().stat(Stat.SPECIAL\_ATTACK,2);

P.addEffect(raise);

}

protected String describe(){

String[] des=this.getClass().toString().split("\\.");

return "uses " + des[des.length-1];

}

}

6.

package move;

import Lab2.lab2;

import ru.ifmo.se.pokemon.\*;

public class RockSlide extends PhysicalMove {

public RockSlide(double pow,double acc){

super(Type.ROCK,pow,acc);

}

@Override

protected void applyOppEffects(Pokemon P) {

super.applyOppEffects(P);

if(lab2.Chance(0.3)){

Effect.flinch(P);

}

}

@Override

protected String describe() {

String[] des=this.getClass().toString().split("\\.");

return "uses "+des[des.length-1];

}

}

7.

package move;

import ru.ifmo.se.pokemon.\*;

public class Slash extends PhysicalMove {

String str1="";

int int1 = 0;

public Slash(double pow, double acc) {

super(Type.PSYCHIC, pow, acc);

}

@Override

protected double calcCriticalHit(Pokemon pokemon, Pokemon pokemon1) {

if(1/8D < Math.random()){

System.out.print("Critical!\n");

return 2.0D;

}

else {

return 1.0D;

}

}

@Override

protected String describe() {

String[] des = this.getClass().toString().split("\\.");

return "uses " + des[des.length - 1];

}

}

8.

package move;

import ru.ifmo.se.pokemon.Effect;

import ru.ifmo.se.pokemon.PhysicalMove;

import ru.ifmo.se.pokemon.Pokemon;

import ru.ifmo.se.pokemon.Type;

import Lab2.lab2;

public class SmartStrike extends PhysicalMove {

public SmartStrike (double pow,double acc){

super(Type.STEEL,pow,acc);

}

protected boolean checkAccuracy(Pokemon attack,Pokemon defence){

super.checkAccuracy(attack,defence);

return true;

}

protected String describe(){

String[] des =this.getClass().toString().split("\\.");

return "uses "+des[des.length-1];

}

}

9.

package move;

import ru.ifmo.se.pokemon.PhysicalMove;

import ru.ifmo.se.pokemon.Pokemon;

import ru.ifmo.se.pokemon.Type;

public class StoneEdge extends PhysicalMove {

public StoneEdge (double pow,double acc){

super(Type.ROCK,pow,acc);

}

protected double calcCriticalHit(Pokemon pokemon, Pokemon pokemon1) {

if(1/8D < Math.random()){

System.out.print("Critical!\n");

return 2.0D;

}

else {

return 1.0D;

}

}

protected String describe(){

String[] des =this.getClass().toString().split("\\.");

return "uses "+des[des.length-1];

}

}

Pokomen:

1.

package mypokemon;

import move.DoubleTeam;

import move.DreamEater;

import move.Leer;

import move.NastyPlot;

import ru.ifmo.se.pokemon.Type;

public class Sableye extends ru.ifmo.se.pokemon.Pokemon {

public Sableye(String name,int level) {

super(name, level);

super.setStats(50, 75, 75, 65, 65, 50);

super.setType(Type.DARK,Type.GHOST);

DreamEater skill1 = new DreamEater(100,100);

DoubleTeam skill2 = new DoubleTeam(0,100);

Leer skill3 = new Leer(0,100);

NastyPlot skill4 = new NastyPlot(0,0);

super.setMove(skill1,skill2,skill4,skill4);

}

}

2.

package mypokemon;

import move.DoubleTeam;

import move.NastyPlot;

import move.RockSlide;

import move.Slash;

import ru.ifmo.se.pokemon.\*;

public class Teddiursa extends ru.ifmo.se.pokemon.Pokemon {

public Teddiursa(String name, int level) {

super(name, level);

super.setStats(60, 80, 50, 50, 50, 40);

super.setType(Type.NORMAL);

Slash skill1 = new Slash(70,100);

RockSlide skill2 = new RockSlide(75,90);

DoubleTeam skill3 = new DoubleTeam(0,0);

super.setMove(skill1,skill2,skill3);

}

}

3.

Package mypokemon;

import move.DreamEater;

import move.FlameThrower;

import move.SmartStrike;

import ru.ifmo.se.pokemon.\*;

public class Togekiss extends ru.ifmo.se.pokemon.Pokemon{

public Togekiss(String name, int level) {

super(name, level);

super.setStats(85, 50, 95, 120, 115, 80);

super.setType(Type.FAIRY,Type.FLYING);

DreamEater skill1 =new DreamEater(100,100);

FlameThrower skill2 = new FlameThrower(90,100);

SmartStrike skill3 = new SmartStrike(70,100);

super.setMove(skill1,skill2);

}

}

4.

package mypokemon;

import move.DreamEater;

import move.FlameThrower;

import ru.ifmo.se.pokemon.\*;

public class Togepi extends ru.ifmo.se.pokemon.Pokemon{

public Togepi(String name, int level) {

super(name, level);

super.setStats(35, 20, 65, 40, 65, 20);

super.setType(Type.FAIRY);

DreamEater skill1 =new DreamEater(100,100);

FlameThrower skill2 = new FlameThrower(90,100);

super.setMove(skill1,skill2);

}

}

5.

package mypokemon;

import move.DoubleTeam;

import move.DreamEater;

import move.FlameThrower;

import move.SmartStrike;

import ru.ifmo.se.pokemon.\*;

public class Togetic extends ru.ifmo.se.pokemon.Pokemon{

public Togetic(String name, int level) {

super(name, level);

super.setStats(55, 40, 85, 80, 105, 40);

DreamEater skill1 =new DreamEater(100,100);

FlameThrower skill2 = new FlameThrower(90,100);

SmartStrike skill3 = new SmartStrike(70,100);

super.setMove(skill1,skill2,skill3);

}

}

6.

package mypokemon;

import move.DoubleTeam;

import move.RockSlide;

import move.Slash;

import move.StoneEdge;

import ru.ifmo.se.pokemon.\*;

public class Ursaring extends ru.ifmo.se.pokemon.Pokemon{

public Ursaring(String name, int level) {

super(name, level);

super.setStats(90, 130, 75, 75, 75, 55);

super.setType(Type.NORMAL);

Slash skill1 = new Slash(70,100);

RockSlide skill2 = new RockSlide(75,90);

DoubleTeam skill3 = new DoubleTeam(0,0);

StoneEdge skill4 = new StoneEdge(100,80);

super.setMove(skill1,skill2,skill3,skill4);

}

}

Результат:

Teddiursa teddiursa from the team Yellow enters the battle!

Togekiss togekiss from the team Purple enters the battle!

Togekiss togekiss uses FlameThrower.

Critical hit!

Teddiursa teddiursa loses 129 hit points.

Teddiursa teddiursa misses

Togekiss togekiss uses FlameThrower.

Teddiursa teddiursa loses 100 hit points.

Teddiursa teddiursa uses RockSlide.

Togekiss togekiss loses 44 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Critical hit!

Teddiursa teddiursa misses

Togekiss togekiss uses DreamEater and HP+ 0.

Teddiursa teddiursa uses Slash.

Critical!

Togekiss togekiss loses 48 hit points.

Togekiss togekiss uses FlameThrower.

Teddiursa teddiursa loses 66 hit points.

Teddiursa teddiursa faints.

Togetic togetic from the team Yellow enters the battle!

Togekiss togekiss uses FlameThrower.

Togetic togetic loses 44 hit points.

Togetic togetic uses FlameThrower.

Togekiss togekiss loses 32 hit points.

Togekiss togekiss uses FlameThrower.

Togetic togetic loses 37 hit points.

Togetic togetic uses DreamEater and HP+ 0.

Togekiss togekiss uses DreamEater and HP+ 0.

Togetic togetic uses FlameThrower.

Togekiss togekiss loses 23 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Togetic togetic uses DreamEater and HP+ 0.

Togekiss togekiss uses DreamEater and HP+ 0.

Togetic togetic uses FlameThrower.

Togekiss togekiss loses 34 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Critical hit!

Togetic togetic uses SmartStrike.

Togekiss togekiss loses 8 hit points.

Togekiss togekiss uses FlameThrower.

Togetic togetic loses 34 hit points.

Togetic togetic is burned

Togetic togetic uses SmartStrike.

Togekiss togekiss restores 1 hit points.

Togetic togetic loses 14 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Togetic togetic uses DreamEater and HP+ 0.

Togetic togetic loses 14 hit points.

Togekiss togekiss uses FlameThrower.

Critical hit!

Togetic togetic loses 78 hit points.

Togetic togetic uses FlameThrower.

Togekiss togekiss loses 37 hit points.

Togekiss togekiss is burned

Togetic togetic loses 14 hit points.

Sableye sableye from the team Yellow enters the battle!

Togekiss togekiss uses FlameThrower.

Sableye sableye loses 84 hit points.

Sableye sableye misses

Togekiss togekiss loses 18 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Sableye sableye isn't affected by PSYCHIC

Sableye sableye uses DoubleTeam.

Togekiss togekiss loses 18 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Sableye sableye isn't affected by PSYCHIC

Sableye sableye misses

Togekiss togekiss loses 18 hit points.

Togekiss togekiss uses DreamEater and HP+ 0.

Sableye sableye isn't affected by PSYCHIC

Sableye sableye misses

Togekiss togekiss loses 18 hit points.

Togepi togepi from the team Purple enters the battle!

Sableye sableye misses

Togepi togepi uses FlameThrower.

Sableye sableye loses 22 hit points.

Sableye sableye uses DoubleTeam.

Togepi togepi uses DreamEater and HP+ 0.

Sableye sableye isn't affected by PSYCHIC

Sableye sableye uses DoubleTeam.

Togepi togepi uses FlameThrower.

Sableye sableye loses 35 hit points.

Sableye sableye misses

Togepi togepi uses DreamEater and HP+ 0.

Sableye sableye isn't affected by PSYCHIC

Sableye sableye misses

Togepi togepi uses FlameThrower.

Sableye sableye loses 20 hit points.

Sableye sableye uses DreamEater and HP+ 0.

Togepi togepi uses FlameThrower.

Sableye sableye loses 31 hit points.

Sableye sableye misses

Togepi togepi uses FlameThrower.

Critical hit!

Sableye sableye loses 68 hit points.

Sableye sableye faints.

Team Yellow loses its last Pokemon.

The team Purple wins the battle!

Вывод:

1. Учился как использовать сторонние jar-файлы вместе с своей программой.
2. Учился слова extends,super
3. Учился читать объяснение классов и использование класса