```
Script started on 2024-02-20 17:37:57-06:00 [TERM="xterm-256color" TTY="/dev/pts/0" COLUMNS="252" LINES="58"]
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ pwd
[?2004l
/home/jovyan/CS2/Projects/Project_2
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ls -la
[?2004l
total 20
drwxr-sr-x 3 jovyan users 4096 Feb 20 17:37 [0m[01;34m.[0m
drwxr-sr-x 5 jovyan users 4096 Feb 12 14:30 [01;34m..[0m
-rw-r--r-- 1 jovyan users 5069 Feb 20 14:42 combatcalculator.cpp
drwxr-sr-x 2 jovyan users 4096 Feb 20 17:37 [01;34m.ipynb_checkpoints[0m
-rw-r--r-- 1 jovyan users    0 Feb 20 17:37 Sabin_Project_2.log
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ cat cat -n coma[Kbatcalculator.cpp
[?2004l
cat: cat: No such file or directory
     1  /*
     2  Tyler Sabin
     3  Section 004
     4  Project 2
     5  In this project, we will be taking, and validating,
     6  inputs using a switch and case expression
     7  */
     8
     9  #include <iostream>
    10  #include <string>
    11  #include <iomanip>
    12
    13  int main(){
    14
    15      //Set variables for choice, damage and category
    16      std::string Choice{};
    17      float Damage{};
    18      std::string Category{};
    19
    20      float a_damage{};
    21      float n_damage{};
    22      float h_damage{};
    23
    24
    25      //Print out the calc UI and ask for inputs
    26      std::cout << "---------------------------------------" << '\n';
    27      std::cout << "------ Amazing Combat Calculator ------" << '\n';
    28      std::cout << "---------------------------------------" << '\n';
    29      std::cout << "Enter ability name: ";
    30      std::getline(std::cin, Choice);
    31      std::cout << "Enter base damage: ";
    32      std::cin >> Damage;
    33      std::cout << "Enter ability category: ";
    34      std::cin.ignore();
    35      std::getline(std::cin, Category);
    36      std::cout << '\n' << '\n';
    37
    38      std::cout << std::fixed << std::setprecision(1);
    39
    40      int Choice_Int{};
    41
    42
    43      //Convert input to an int for switch expression
    44      if(Choice == "Rest"){
    45          Choice_Int = 1;
    46      } else if(Choice == "Slap"){
    47          Choice_Int = 2;
    48      } else if(Choice == "FrostFire"){
    49          Choice_Int = 3;
    50      } else{
    51          Choice_Int = 4;
    52      }
    53
    54      switch(Choice_Int){
    55
    56          //For case 1-3, check to make sure the damage is between 0-9000
    57          case 1:
    58              if(Damage <= 0){
    59                  std::cout << "All ability damage must be positive." << std::endl;
    60              } else if(Damage > 9000){
    61                  std::cout << "Only Goku can deal more than 9000 dmg." << std::endl;
    62              } else{
    63
    64                  //Validate category and make proper calculations
    65                  if(Category == "A"){
```

```
    66                      a_damage = Damage / 4.0;
    67                      std::cout << Choice << ' ' << " dealt " << a_damage << ' ' << "area of effect damage to each
target." << std::endl;
    68                  } else if(Category == "N"){
    69                      n_damage = Damage * 1.2;
    70                      std::cout << Choice << ' ' << " dealt " << n_damage << ' ' << "boring normal damage to the
target." << std::endl;
    71                  } else if(Category == "H"){
    72                      h_damage = Damage * (-1.0);
    73                      std::cout << Choice << ' ' << " dealt " << h_damage << ' ' << "damage healing the target." <<
std::endl;
    74                  } else{
    75                      //If category is not a valid input, inform user
    76                      std::cout << "Ability category" << ' ' << Category << ' ' << "not implemented." << std::endl;
    77                  }
    78              }
    79              break;
    80          case 2:
    81              if(Damage <= 0){
    82                  std::cout << "All ability damage must be positive." << std::endl;
    83              } else if(Damage > 9000){
    84                  std::cout << "Only Goku can deal more than 9000 dmg." << std::endl;
    85              } else{
    86                  if(Category == "A"){
    87                      a_damage = Damage / 4.0;
    88                      std::cout << Choice << ' ' << " dealt " << a_damage << ' ' << "area of effect damage to each
target." << std::endl;
    89                  } else if(Category == "N"){
    90                      n_damage = Damage * 1.2;
    91                      std::cout << Choice << ' ' << " dealt " << n_damage << ' ' << "boring normal damage to the
target." << std::endl;
    92                  } else if(Category == "H"){
    93                      h_damage = Damage * (-1.0);
    94                      std::cout << Choice << ' ' << " dealt " << h_damage << ' ' << "damage healing the target." <<
std::endl;
    95                  } else{
    96                      std::cout << "Ability category" << ' ' << Category << ' ' << "not implemented." << std::endl;
    97                  }
    98              }
    99              break;
   100          case 3:
   101              if(Damage <= 0){
   102                  std::cout << "All ability damage must be positive." << std::endl;
   103              } else if(Damage > 9000){
   104                  std::cout << "Only Goku can deal more than 9000 dmg." << std::endl;
   105              } else{
   106                  if(Category == "A"){
   107                      a_damage = Damage / 4.0;
   108                      std::cout << Choice << ' ' << " dealt " << a_damage << ' ' << "area of effect damage to each
target." << std::endl;
   109                  } else if(Category == "N"){
   110                      n_damage = Damage * 1.2;
   111                      std::cout << Choice << ' ' << " dealt " << n_damage << ' ' << "boring normal damage to the
target." << std::endl;
   112                  } else if(Category == "H"){
   113                      h_damage = Damage * (-1.0);
   114                      std::cout << Choice << ' ' << " dealt " << h_damage << ' ' << "damage healing the target." <<
std::endl;
   115                  } else{
   116                      std::cout << "Ability category" << ' ' << Category << ' ' << "not implemented." << std::endl;
   117                  }
   118              }
   119              break;
   120          default:
   121          //If the input for choice is not valid, we will let the user know
   122              std::cout << "Ability" << ' ' << Choice << ' ' << "not implemented yet." << std::endl;
   123              break;
   124      }
   125  }[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ g++ -Wall -Wextra -Werror combatcalculator.cpp -o combat
[?2004l
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
--------------------------------------
------ Amazing Combat Calculator ------
--------------------------------------
Enter ability name: Slap
Enter base damage: 200.25
Enter ability category: N


Slap  dealt 240.3 boring normal damage to the target.
```

```
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: Rest
Enter base damage: 100
Enter ability category: H


Rest  dealt -100.0 damage healing the target.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: FrostFire
Enter base damage: 7777.77
Enter ability category: A


FrostFire  dealt 1944.4 area of effect damage to each target.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: TomatoToss
Enter base damage: 900
Enter ability category: N


Ability TomatoToss not implemented yet.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: TomatoToss
Enter base damage: -1
Enter ability category: H


Ability TomatoToss not implemented yet.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: ^[[5~R      Rest
Enter base damage: 9001
Enter ability category: H


Only Goku can deal more than 9000 dmg.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: Slap
Enter base damage: -10
Enter ability category: N


All ability damage must be positive.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: FrostFire
Enter base damage: 3642.88
Enter ability category: CX  X
```

```
Ability category X not implemented.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name:
Enter base damage: 0.00
Enter ability category:


Ability   not implemented yet.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: Slap
Enter base damage: 94
Enter ability category: H


Slap  dealt -94.0 damage healing the target.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ ./combat
[?2004l
---------------------------------------
------ Amazing Combat Calculator ------
---------------------------------------
Enter ability name: Rest
Enter base damage: 21.24
Enter ability category: Potato


Ability category Potato not implemented.
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Projects/Project_2[01;32mjovyan@jupyter-
tes4j[00m:[01;34m~/CS2/Projects/Project_2[00m$ exit
[?2004l
exit

Script done on 2024-02-20 17:41:21-06:00 [COMMAND_EXIT_CODE="0"]
```