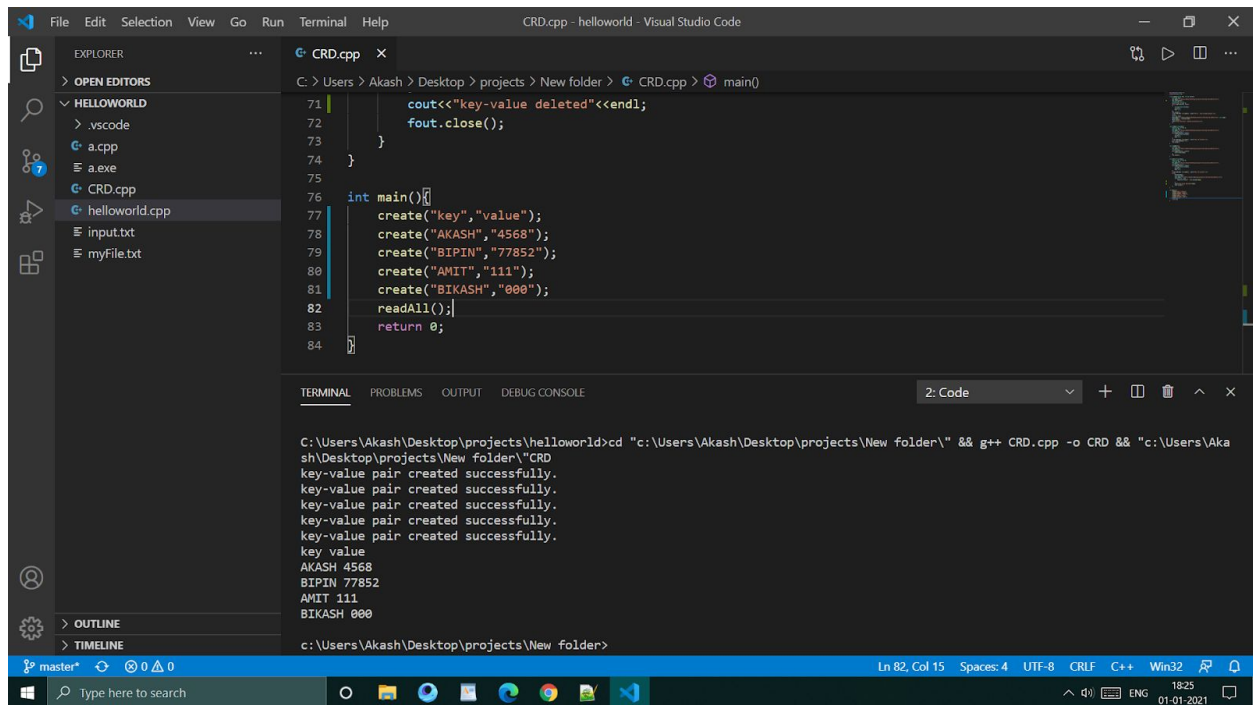


1. Creating key-value pairs and storing data into file.

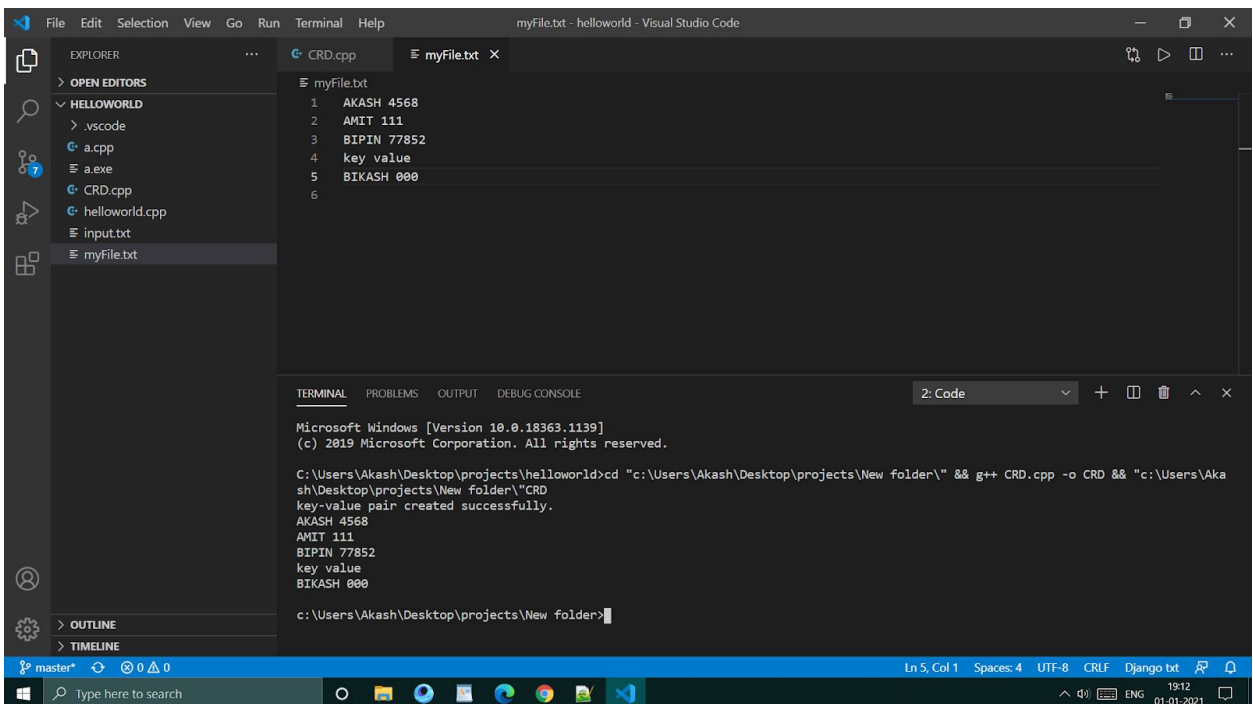


The screenshot shows the Visual Studio Code interface with the file `CRD.cpp` open. The code defines a `create` function and a `main` function that creates five key-value pairs and stores them in a file. The terminal output shows the successful execution of the program, displaying the created key-value pairs and the contents of the file.

```
71 |         cout<<"key-value deleted"<<endl;
72 |         fout.close();
73 |     }
74 | }
75 |
76 | int main(){
77 |     create("key","value");
78 |     create("AKASH","4568");
79 |     create("BIPIN","77852");
80 |     create("AMIT","111");
81 |     create("BIKASH","000");
82 |     readAll();
83 |     return 0;
84 | }
```

```
C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Aka
sh\Desktop\projects\New folder\CRD
key-value pair created successfully.
key-value pair created successfully.
key-value pair created successfully.
key-value pair created successfully.
key-value pair created successfully.
key value
AKASH 4568
BIPIN 77852
AMIT 111
BIKASH 000
c:\Users\Akash\Desktop\projects\New folder>
```

2. myFile.txt after Create operation.



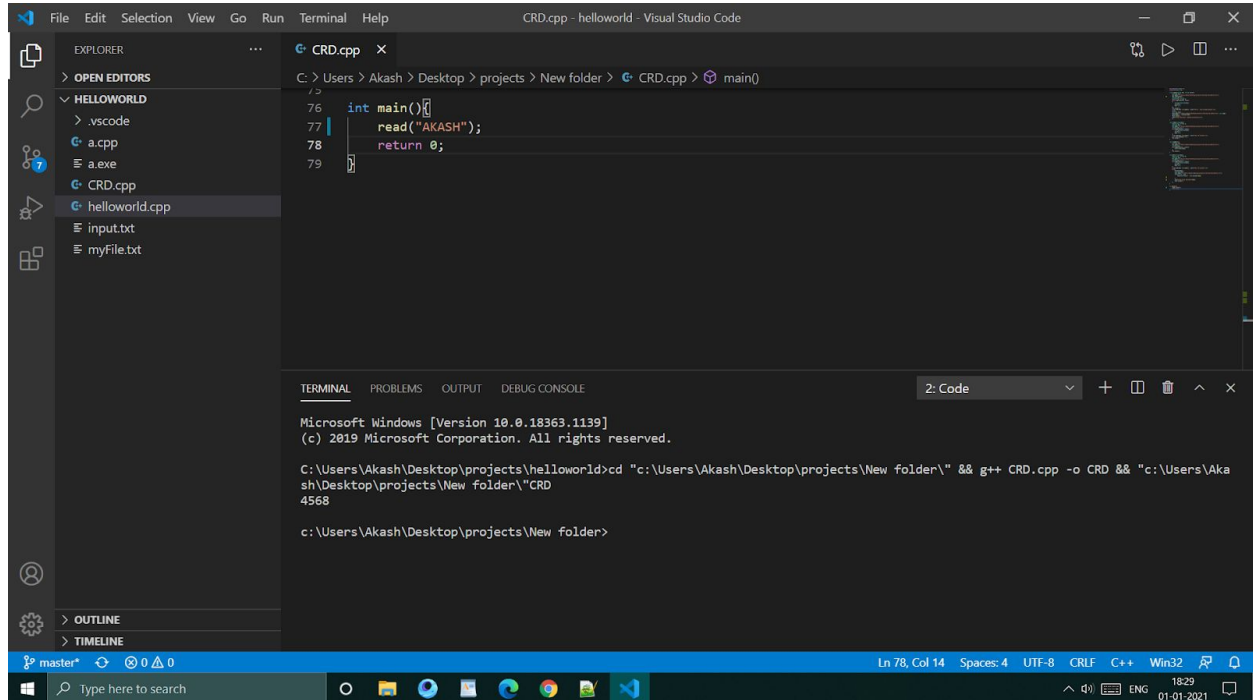
The screenshot shows the Visual Studio Code interface with the file `myFile.txt` open. The file contains the key-value pairs created by the program. The terminal output shows the successful execution of the program, displaying the created key-value pairs and the contents of the file.

```
1 AKASH 4568
2 AMIT 111
3 BIPIN 77852
4 key value
5 BIKASH 000
6
```

```
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Aka
sh\Desktop\projects\New folder\CRD
key-value pair created successfully.
AKASH 4568
AMIT 111
BIPIN 77852
key value
BIKASH 000
c:\Users\Akash\Desktop\projects\New folder>
```

3. Reading a value using key from the file.



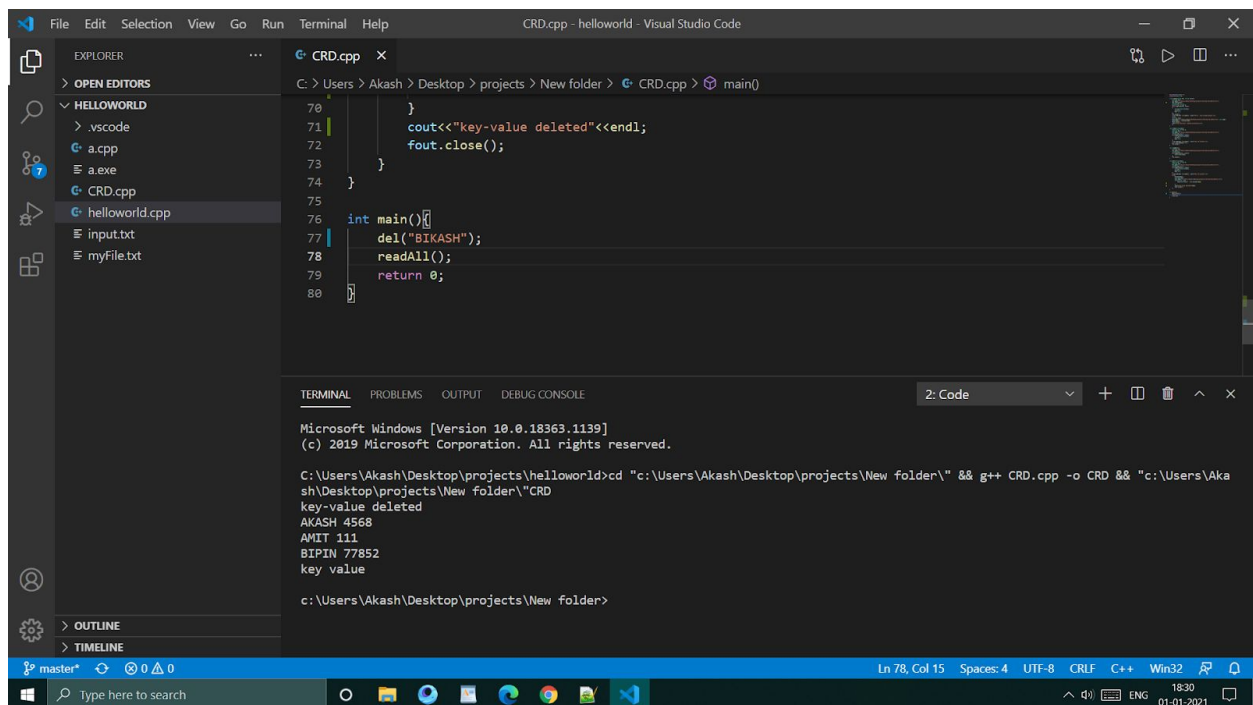
The screenshot shows the Visual Studio Code interface with a C++ file named `CRD.cpp` open. The Explorer panel on the left shows the project structure, including `helloworld.cpp`, `input.txt`, and `myFile.txt`. The main editor displays the following code:

```
76 int main()  
77 {  
78     read("AKASH");  
79     return 0;  
80 }
```

The TERMINAL panel at the bottom shows the execution of the program. The command `g++ CRD.cpp -o CRD` has been run, and the output shows the program reading the value "AKASH" from the file.

```
Microsoft Windows [Version 10.0.18363.1139]  
(c) 2019 Microsoft Corporation. All rights reserved.  
  
C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Akash\Desktop\projects\New folder\CRD"  
4568  
  
c:\Users\Akash\Desktop\projects\New folder>
```

4. Deleting a value from a file using a key



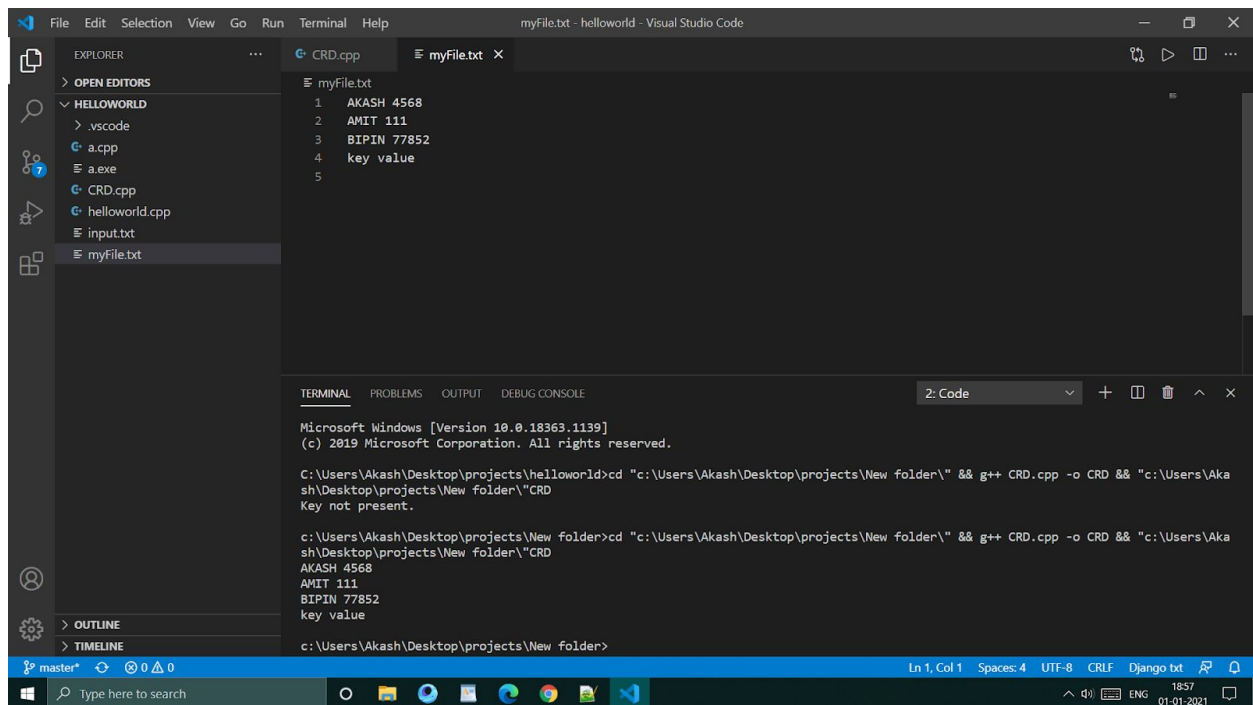
The screenshot shows the Visual Studio Code interface with a C++ file named `CRD.cpp` open. The Explorer panel on the left shows the project structure, including `helloworld.cpp`, `input.txt`, and `myFile.txt`. The main editor displays the following code:

```
70 }  
71 cout<<"key-value deleted"<<endl;  
72 fout.close();  
73 }  
74 }  
75 }  
76 int main()  
77 {  
78     del("BIKASH");  
79     readAll();  
80     return 0;  
81 }
```

The TERMINAL panel at the bottom shows the execution of the program. The command `g++ CRD.cpp -o CRD` has been run, and the output shows the program deleting the value "BIKASH" from the file and then reading the remaining values.

```
Microsoft Windows [Version 10.0.18363.1139]  
(c) 2019 Microsoft Corporation. All rights reserved.  
  
C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Akash\Desktop\projects\New folder\CRD"  
key-value deleted  
AKASH 4568  
AMIT 111  
BIPIN 77852  
key value  
  
c:\Users\Akash\Desktop\projects\New folder>
```

5. myFile.txt after Delete operation.



The screenshot shows the Visual Studio Code interface with the file explorer on the left displaying the project structure. The file `myFile.txt` is selected. The main editor area shows the content of `myFile.txt` after a delete operation. The terminal at the bottom shows the command `g++ CRD.cpp -o CRD` and the output `Key not present.`

```
myFile.txt
1 AKASH 4568
2 AMIT 111
3 BIPIN 77852
4 key value
5

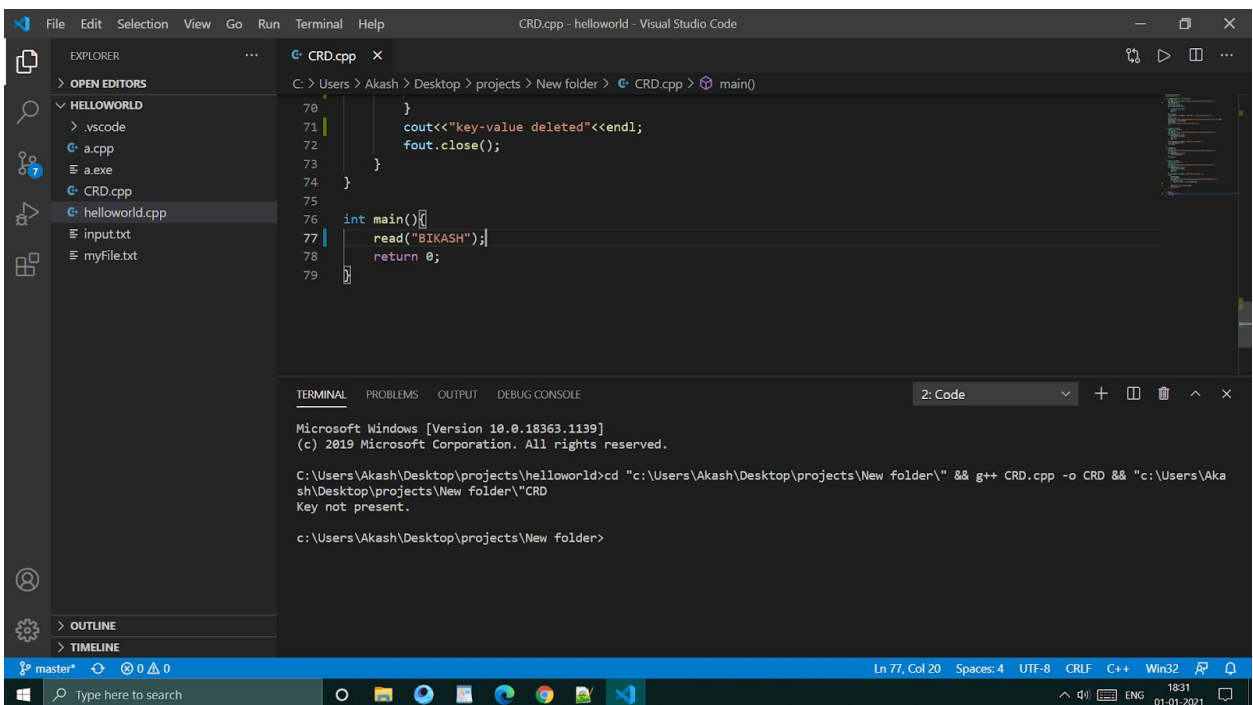
TERMINAL
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Aka
sh\Desktop\projects\New folder\CRD
Key not present.

c:\Users\Akash\Desktop\projects\New folder>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Aka
sh\Desktop\projects\New folder\CRD
AKASH 4568
AMIT 111
BIPIN 77852
key value

c:\Users\Akash\Desktop\projects\New folder>
```

6. Reading a key which is not present in the file. (Error Displayed).



The screenshot shows the Visual Studio Code interface with the file explorer on the left displaying the project structure. The file `CRD.cpp` is selected. The main editor area shows the code in `CRD.cpp`. The terminal at the bottom shows the command `g++ CRD.cpp -o CRD` and the output `Key not present.`

```
CRD.cpp
70 }
71 cout<<"key-value deleted"<<endl;
72 fout.close();
73 }
74 }
75
76 int main()
77 {
78     read("BIKASH");
79     return 0;
80 }
```

```
TERMINAL
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Akash\Desktop\projects\helloworld>cd "c:\Users\Akash\Desktop\projects\New folder\" && g++ CRD.cpp -o CRD && "c:\Users\Aka
sh\Desktop\projects\New folder\CRD
Key not present.

c:\Users\Akash\Desktop\projects\New folder>
```