

Activitat AC02 GIT Terminal

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INSTRUCCIONS

Projecte ECLIPSE: m05_05_git_ac02_terminal

Package: circle

Classes: Circle.java, CircleMain.java

Repositori remote:

Projecte: **m05_05_git_ac02_terminal**

Comparteix el teu projecte del GIT (Gitlab.com) amb el professor:

A GitLab.com aneu a:

Manage > Members

Feu clic a:

Invite members

Afegiu l'usuari: **@joanseculi-escola** i seleccioneu "Developer".

Repositori local:

El mateix directori que el projecte ECLIPSE:

m05_05_git_ac02_terminal

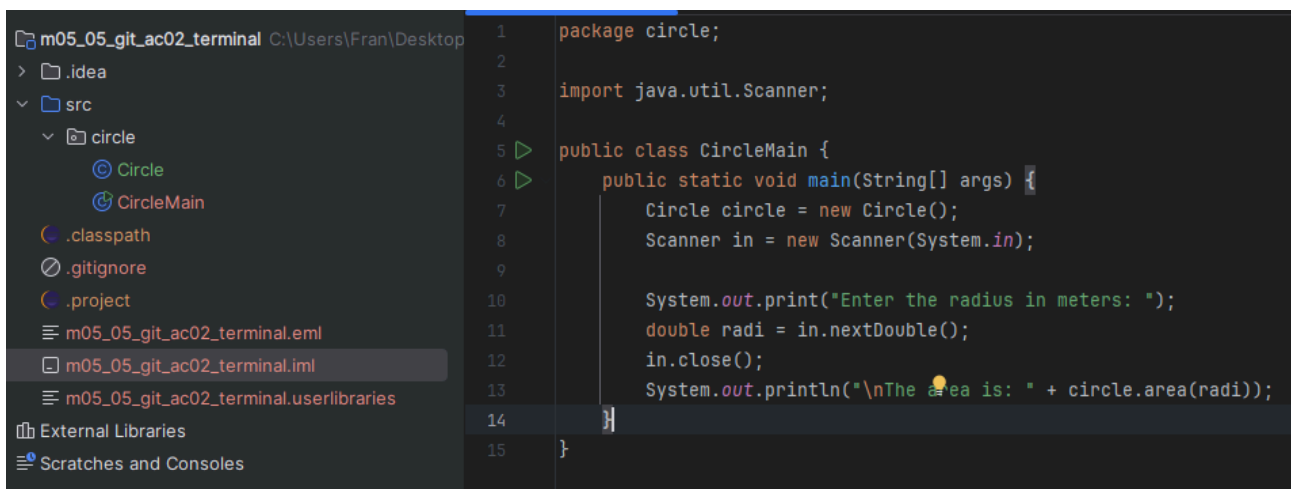
Crear un package **circle** i dues classe **Circle.java** i **CircleMain.java** amb el següent contingut:

```
package circle;
public class Circle {
    /**
     * Calculates the area of a circle
     * @param radius a double numbers
     * @return the area of a circle
     */
    public double area(double radius) {
        //TODO
        return 0;
    }
}
```

```
package circle;
import java.util.Scanner;
public class CircleMain {
    public static void main(String[] args) {
        Circle circle = new Circle();
        Scanner in = new Scanner(System.in);

        System.out.print("Enter the radius in meters: ");
        double radi = in.nextDouble();
        in.close();
        System.out.println("\nThe area is: " + circle.area(radi));
    }
}
```

Per cada **apartat** heu de realitzar una captura per dexiar constància de la solució. La següent icona indica que has d'afegir una captura de pantalla:



1. COMPLETAR EL PROGRAMA Circle.java

Completa el següent mètode de la classe Circle.java:

```
public double area(double radius) {  
    //TODO  
    return 0;  
}
```

L'ària d'un cercle és:

$$A = \pi \cdot r^2$$

On r és el radi, i π és el nombre PI.

Executa el programa i comprova que el resultat és el següent:

```
Enter the radius in meters: 10  
The area is: 314.1592653589793
```

2. INICIALITZAR EL GIT

Inicialitza el git, i comprova el satge.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES  
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (master)  
$ git init --initial-branch=main  
Initialized empty Git repository in C:/Users/Fran/Desktop/DAM 1/PROGRAMACI3N_M03  
_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal/  
.git/
```

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES  
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git log  
commit cb7c8ca94ca215b0fcbff59312d0905edb3221b6 (HEAD -> main, origin/main)  
Author: Juan Francisco <Ditarex95@gmail.com>  
Date:   Wed Mar 26 09:16:06 2025 +0100  
  
    Creating project compatibility with Eclipse IDE  
  
commit b5656ef4f182de84dfd05d9f72bca62e15136a56  
Author: Juan Francisco <Ditarex95@gmail.com>  
Date:   Wed Mar 26 09:14:34 2025 +0100  
  
    First commit
```

Llista les dades de configuraci3:

3. NO SEGUIR ELS FITXERS *.class

Normalment el fitxers compilats *.class no s'afegeixen al repositoris ja que aquests es poden aconseguir compilant els fitxers *.java independentment de la m3quina en la que es treballa, a m3s el GIT no pot seguir-los perquè el seu contingut 3s codi bytecode, 3s a dir, no 3s de tipus text pla (plain text), per tant, hem d'incloure en el fitxer **.gitignore** tota la carpeta /bin/, en aqueta carpeta es troben tots els fitxers compilats.

Mostra el contingut del teu fitxer **.gitignore**:

```

### IntelliJ IDEA ###
out/
!*/src/main/**/out/
!*/src/test/**/out/

### Eclipse ###
.appt_generated
.classpath
.factorypath
.project
.settings
.springBeans
.sts4-cache
bin/
!*/src/main/**/bin/
!*/src/test/**/bin/

### NetBeans ###
/nbproject/private/
/nbbuild/
/dist/
/nbdist/
/.nb-gradle/

### VS Code ###
.vscode/

### Mac OS ###
.DS_Store

```

4. PRIMER STAGE i COMMIT

Afegeix tots els fitxers al stage i realitza un commit.

Missatge del commit: **"First commit"**

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git add .
warning: in the working copy of 'src/circle/CircleMain.java', LF will be replaced
by CRLF the next time Git touches it

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git commit -m "First commit, area circle method created"
[main a987ac7] First commit, area circle method created
4 files changed, 151 insertions(+), 5 deletions(-)
create mode 100644 .idea/uiDesigner.xml
delete mode 100644 src/Main.java
create mode 100644 src/circle/Circle.java
create mode 100644 src/circle/CircleMain.java

```

5. DESFER UN CANVI DEL WORKSPACE

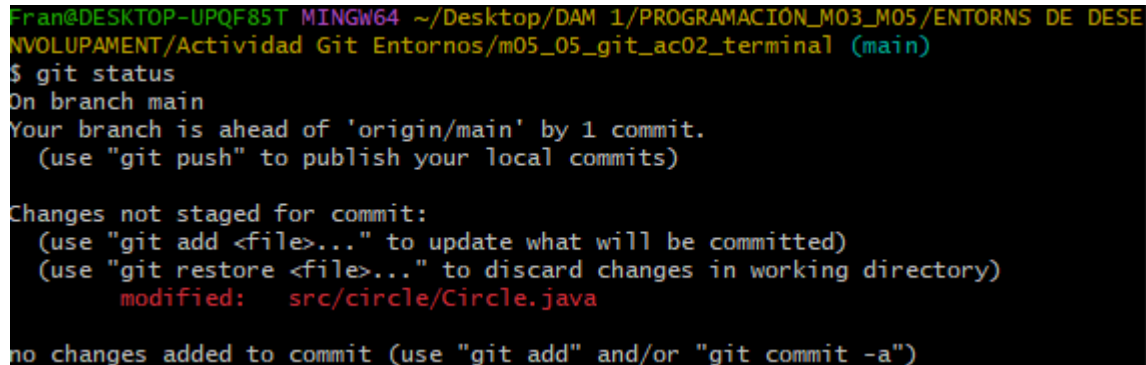
Eliminarem un canvi que tenim al workspace, és a dir, que no s'ha pujat al stage. Primer realitzarem un canvi i sense fer cap stage, l'eliminem.

5.1 AFEGIR UN NOU CANVI A LA CLASSE Circle.java

Primer, edita el fitxer **Circle.java** i afegeix una capçalera amb la següent informació, utilitza el teu nom, cognom, mail i la data actual:

```
/*
 * Circle.java          19.12.2023
 *
 * Copyright 2023 Joan Sèculi <jseculi@escoladeltreball.org>
 *
 * This is free software, licensed under the GNU General Public License v3.
 * See http://www.gnu.org/licenses/gpl.html for more information.
 */
```

Realitza un "git status".



```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/circle/Circle.java

no changes added to commit (use "git add" and/or "git commit -a")
```

5.2 DESFER ELS CANVIS QUE NO S'HAN PUJAT AL STAGE

Ara desfarem els canvis anteriors, és a dir, volem eliminar els canvis del fitxer del workspace (que encara no els hem situat al stage). Quin comandament farem servir?


```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git restore src/circle/Circle.java  
  
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 1 commit.  
  (use "git push" to publish your local commits)  
  
nothing to commit, working tree clean
```

Comprova que hem perdut els canvis en el fitxer **Circle.java**. Els canvis són irrecuperables des de terminal, si mires el codi del programa a Eclipse o per terminal, haurà desaparegut la capçalera.

```
package circle;  
  
public class Circle { 2 usages  
    /**  
     * Calculates the area of a circle  
     * @param radius    a double numbers  
     * @return          the area of a circle  
     */  
    public double area(double radius) { 1 usage  
        return Math.PI * Math.pow(radius, 2);  
    }  
}
```

6. DESFER UN CANVI DEL STAGE

Eliminarem un canvi que tenim al stage. Primer realitzarem un canvi al fitxer, afegirem els canvis al stage i treurem finalment els canvis del stage.

6.1 AFEGIR UN ALTRA COP EL CANVI A LA CLASSE Circle.java

Primer edita el fitxer **Circle.java** i afegeix una capçalera amb la següent informació, utilitza el teu nom, cognom, mail i la data actual:

```
/*  
 * Circle.java          19.12.2023  
 *  
 * Copyright 2023 Joan Sèculi <jseculi@escoladeltreball.org>  
 *  
 * This is free software, licensed under the GNU General Public License v3.  
 * See http://www.gnu.org/licenses/gpl.html for more information.  
 */
```

6.2 DESFER CANVIS EN EL STAGE (ABANS DE FER COMMIT)

Afegeix el fitxer java al stage.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓ_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git add src/circle/Circle.java  
  
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓ_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 1 commit.  
  (use "git push" to publish your local commits)  
  
Changes to be committed:  
  (use "git restore --staged <file>..." to unstage)  
    modified:   src/circle/Circle.java
```

Volem treure els canvis del stage i passar-los al Workspace, quin comandament farem servir?

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git restore --staged src/circle/Circle.java  
  
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 1 commit.  
  (use "git push" to publish your local commits)  
  
Changes not staged for commit:  
  (use "git add <file>..." to update what will be committed)  
  (use "git restore <file>..." to discard changes in working directory)  
        modified:   src/circle/Circle.java  
  
no changes added to commit (use "git add" and/or "git commit -a")
```

Comprova el stage de nou "git status".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 1 commit.  
  (use "git push" to publish your local commits)  
  
Changes not staged for commit:  
  (use "git add <file>..." to update what will be committed)  
  (use "git restore <file>..." to discard changes in working directory)  
        modified:   src/circle/Circle.java  
  
no changes added to commit (use "git add" and/or "git commit -a")
```

7. ELIMINAR UN COMMIT

En aquest apartat eliminarem un commit. Primer, afegirem canvis al fitxer, realitzarem un commit i finalment eliminarem aquest commit.

7.1 AFEGIR UN ALTRA COP EL CANVI A LA CLASSE Circle.java

Nota: en principi ja tenim els canvis de la capçalera en el fitxer, si no és així, afegeix-los de nou.

Primer edita el fitxer **Circle.java** i afegeix una capçalera amb la següent informació, utilitza el teu nom, cognom, mail i la data actual:

```
/*
 * Circle.java          19.12.2023
 *
 * Copyright 2023 Joan Sèculi <jseculi@escoladeltreball.org>
 *
 * This is free software, licensed under the GNU General Public License v3.
 * See http://www.gnu.org/licenses/gpl.html for more information.
 */
```

Passa els canvis de la capçalera al stage i realitza un commit.
Missatge del commit: "**Header Circle.java**"

```
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/circle/Circle.java

no changes added to commit (use "git add" and/or "git commit -a")

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git add src/circle/Circle.java

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git commit -m "Header Circle.java"
[main 9bff90c] Header Circle.java
1 file changed, 9 insertions(+)
```

Mostra l'historial de commits amb la comanda "git log --oneline".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git log --oneline  
9bff90c (HEAD -> main) Header Circle.java  
a987ac7 First commit, area circle method created  
cb7c8ca (origin/main) Creating project compatibility with Eclipse IDE  
b5656ef First commit
```

7.2 ELIMINAR L'ÚLTIM COMMIT

Volem desfer el commit però que quedi enregistrat amb un nou commit. Quin comandament farem servir?

git revert HEAD

Nota: ens demana un missatge per aquest nou commit.

Mostra l'historial de commits i comprova que ara hi ha un commit més i els canvis a la classe **Circle.java** s'han eliminat.

```
[main 22508e7] Revert "Revert last commit"
1 file changed, 9 deletions(-)

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNOS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git log
commit 22508e7aad9acf0e3e05569fed2be28db24d98d4 (HEAD -> main)
Author: Juan Francisco <Ditarex95@gmail.com>
Date:   Wed Mar 26 12:06:35 2025 +0100

    Revert "Revert last commit"

    This reverts commit 9bffa90ce01b2ffae80f70b6ab4fc9ccfffe239b6.
```

Comprova que hem perdut els canvis en el fitxer **Circle.java**. Els canvis són irrecuperables des de terminal, si mires el codi del programa a Eclipse o per terminal, haurà desaparegut la capçalera.

```
package circle;

public class Circle { 2 usages
    /**
     * Calculates the area of a circle
     * @param radius    a double numbers
     * @return          the area of a circle
     */
    public double area(double radius) { 1 usage
        return Math.PI * Math.pow(radius, 2);
    }
}
```

8. BRANCA file-readme

8.1 AFEGEIX CANVIS AL FITXER Circle.java

Torna a editar el fitxer **Circle.java** i afegeix un altre cop la capçalera amb la següent informació, utilitza el teu nom, cognom, mail i la data actual:

```
/*
 * Circle.java          19.12.2023
 *
 * Copyright 2023 Joan Sèculi <jseculi@escoladeltreball.org>
 *
 * This is free software, licensed under the GNU General Public License v3.
 * See http://www.gnu.org/licenses/gpl.html for more information.
 */
```

Torna a passar els canvis de la capçalera al stage i realitza un commit.

Missatge del commit: **"Header Circle.java 2"**

```

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/circle/Circle.java

no changes added to commit (use "git add" and/or "git commit -a")

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git add .

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git commit -m "Header Circle.java 2"
[main 65bb47c] Header Circle.java 2
1 file changed, 9 insertions(+)

```

Mostra l'historial de commits.

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git log
commit 65bb47cbe22c8af2bc9d8fed416539567782594b (HEAD -> main)
Author: Juan Francisco <Ditarex95@gmail.com>
Date:   Wed Mar 26 12:14:38 2025 +0100

    Header Circle.java 2

commit 22508e7aad9acf0e3e05569fed2be28db24d98d4
Author: Juan Francisco <Ditarex95@gmail.com>
Date:   Wed Mar 26 12:06:35 2025 +0100

    Revert "Revert last commit"

    This reverts commit 9bffa90ce01b2ffae80f70b6ab4fc9ccfffe239b6.

commit 9bffa90ce01b2ffae80f70b6ab4fc9ccfffe239b6

```


8.2 CREA LA NOVA BRANCA file-readme

Crea una nova branca **file-readme** i llista totes les branques.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git checkout -b file-readme
Switched to a new branch 'file-readme'

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (file-readme)
$ git branch
* file-readme
main
```

Especifica com et mouries a aquesta nova branca.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRA
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_
$ git checkout file-readme
Switched to branch 'file-readme'
```

Com podem saber a quina branca estem? Escriu 3 maneres diferents de fer-ho.

La part entre parèntesis que es troba de color blau, ens diu en quina branca estem

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (file-readme)
$ |
```

En la llista de branques, ens surt de color verd i tenint un asterisc (HEAD) ens diu també la branca en la que ens trobem

```
Fran@DESKTOP-UPQ
NVOLUPAMENT/Acti
$ git branch
* file-readme
main
```

Utilitzant git status, es informa en quina branca ens trobem

```
Fran@DESKTOP-UPQF85T MI
NVOLUPAMENT/Actividad G
$ git status
On branch file-readme
Changes to be committed
(use "git restore --s
```

Crea un fitxer nou **README.md** (md = Markdown) en aquesta nova branca amb el següent contingut:

```
# README.md
```

Program to calculate the area, perimeter and diameter of a circle knowing the radius in meters.

Area

The area of a circle is:

$$A = \text{PI} * \text{radius}^2$$

Perimeter

The perimeter of a circle is:

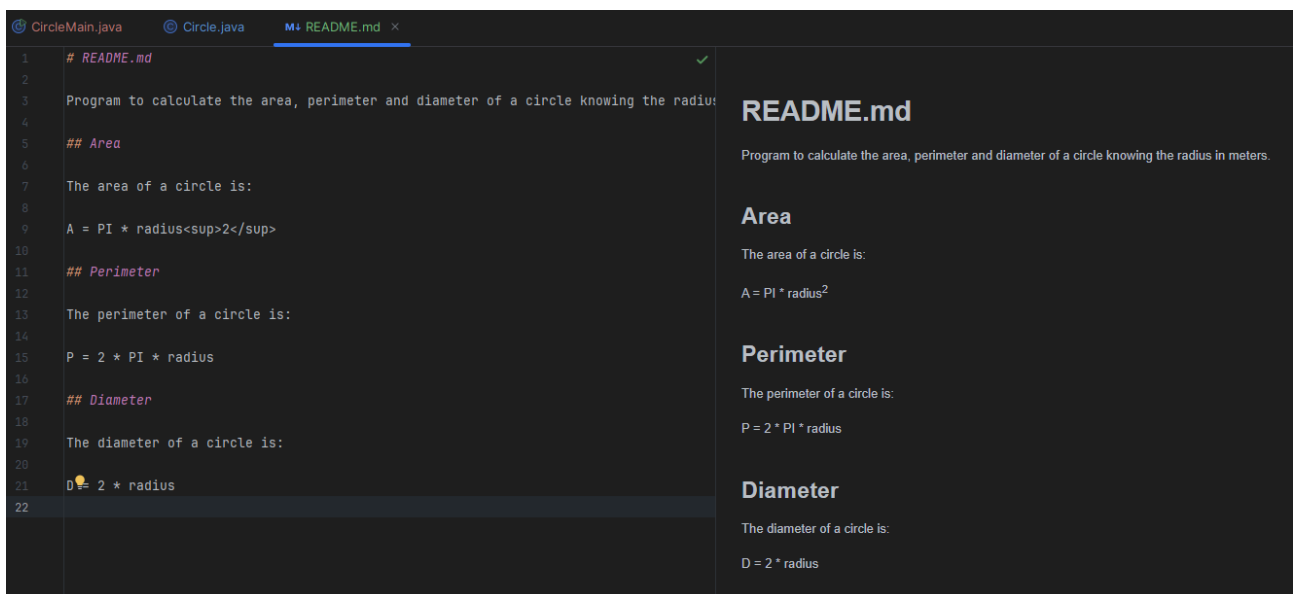
$$P = 2 * \text{PI} * \text{radius}$$

Diameter

The diameter of a circle is:

$$D = 2 * \text{radius}$$

Mostra el contingut del teu fitxer **README.md**:



Realiza un stage i commit.
Missatge del commit: "File README.md"

```
(use "git add <file>..." to include in what
  README.md

nothing added to commit but untracked files p

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/
NVOLUPAMENT/Actividad Git Entornos/m05_05_git
$ git add .

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/
NVOLUPAMENT/Actividad Git Entornos/m05_05_git
$ git commit -m "File README.md"
[file-readme d5735ef] File README.md
1 file changed, 21 insertions(+)
create mode 100644 README.md

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/
NVOLUPAMENT/Actividad Git Entornos/m05_05_git
$ git status
On branch file-readme
nothing to commit, working tree clean
```

Fusiona les branques, mostra com ho faries.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENT
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git branch
  file-readme
* main

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENT
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git merge file-readme && git branch -d file-readme
Updating 65bb47c..d5735ef
Fast-forward
 README.md | 21 +++++
 1 file changed, 21 insertions(+)
 create mode 100644 README.md
Deleted branch file-readme (was d5735ef).
```

Mostra l'historial de commits.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTORNOS/DESVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git log
commit d5735ef1a0086426eac76a403feb7295119630b9 (HEAD -> main)
Author: Juan Francisco <Ditarex95@gmail.com>
Date:   Wed Mar 26 12:24:33 2025 +0100

    File README.md

commit 65bb47cbe22c8af2bc9d8fed416539567782594b
Author: Juan Francisco <Ditarex95@gmail.com>
Date:   Wed Mar 26 12:14:38 2025 +0100

    Header Circle.java 2
```

9. BRANQUES circle-perimeter i circle-diameter

Posicionat a "**master**" i crea una altra branca "**circle-perimeter**".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNOS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git checkout -b circle-perimeter
Switched to a new branch 'circle-perimeter'
```

Posicionat a "**master**" (si no ho estàs) i crea una altra branca "**circle-diameter**".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNOS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git checkout -b circle-diameter
Switched to a new branch 'circle-diameter'
```

9.1 BRANCA circle-perimeter

Situat a la branca "**circle-perimeter**".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNOS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-diameter)
$ git checkout circle-perimeter
Switched to branch 'circle-perimeter'

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNOS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-perimeter)
$
```

Modifica la classe **Circle.java** i afegeix el mètode que calculi el perímetre d'un cercle.

```
/**
 * Calculates the perimeter of a circle
 * @param radius a double number
 * @return the perimeter of a circle
 */
public double perimeter(double radius) {
    //TODO
}
```

La fórmula del perímetre és:

$$P = 2 \cdot \pi \cdot r$$

Fes un stage i commit amb un sol comandament.
Missatge del commit: "**Method perimeter**"

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-perimeter)
$ git add src/circle/Circle.java && git commit -m "Method perimeter"
[circle-perimeter f02c386] Method perimeter
1 file changed, 10 insertions(+)
```

Mostra l'historial de commits.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-perimeter)
$ git log
commit f02c3866d424b5ee052af04756b2f5735a20048d (HEAD -> circle-perimeter)
Author: Juan Francisco <Ditarex95@gmail.com>
Date: Wed Mar 26 12:33:38 2025 +0100

    Method perimeter

commit d5735ef1a0086426eac76a403feb7295119630b9 (main, circle-diameter)
Author: Juan Francisco <Ditarex95@gmail.com>
Date: Wed Mar 26 12:24:33 2025 +0100

    File README.md
```

9.2 BRANCA circle-diameter

Situat a la branca "circle-diameter".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-perimeter)
$ git checkout circle-diameter
Switched to branch 'circle-diameter'

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DE
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-diameter)
$ |
```

Modifica la classe **Circle.java** i afegeix el mètode que calculi el diàmetre d'un cercle.

```
/**
 * Calculates the diameter of a circle
 * @param radius is a double numbers
 * @return a double: the diameter of a circle
 */
public double diameter(double radius) {
    //TODO
}
```

La fórmula del diameter és:

$$P = \pi \cdot r$$

Fes un stage i commit amb un sol comandament.

Missatge del commit: **"Method diameter"**

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-diameter)
$ git add src/circle/Circle.java && git commit -m "Method diameter"
[circle-diameter 55be051] Method diameter
1 file changed, 10 insertions(+)
```

Mostra l'historial de commits de manera gràfica.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (circle-diameter)
$ git log --oneline
55be051 (HEAD -> circle-diameter) Method diameter
d5735ef (main) File README.md
65bb47c Header Circle.java 2
22508e7 Revert "Revert last commit"
9bff90c Header Circle.java
a987ac7 First commit, area circle method created
cb7c8ca (origin/main) Creating project compatibility with Eclipse IDE
b5656ef First commit
```

10. MERGE BRANCA circle-perimeter

Situat a master i realitza un merge de la branca "circle-perimeter".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTOR
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git merge circle-perimeter
Updating d5735ef..f02c386
Fast-forward
 src/circle/Circle.java | 10 ++++++++
 1 file changed, 10 insertions(+)
```

Mostra l'historial de commits de manera gràfica.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTOR
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git log --oneline
f02c386 (HEAD -> main, circle-perimeter) Method perimeter
d5735ef File README.md
65bb47c Header Circle.java 2
22508e7 Revert "Revert last commit"
9bff90c Header Circle.java
a987ac7 First commit, area circle method created
cb7c8ca (origin/main) Creating project compatibility with Eclipse IDE
b5656ef First commit
```


11. MERGE BRANCA circle-diameter

Situat a master i realitza un merge de la branca "circle-diameter".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTORNS DE DES  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git merge circle-diameter  
Auto-merging src/circle/Circle.java  
CONFLICT (content): Merge conflict in src/circle/Circle.java  
Automatic merge failed; fix conflicts and then commit the result.  
  
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTORNS DE DES  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main|MERGING)  
$ git status  
On branch main
```

Has de resoldre els conflictes en el codi i posteriorment realitzar un stage i un commit.

Missatge del commit: "**Resolving conflict**"

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTORNS DE DES  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main|MERGING)  
$ git commit -m "Resolved conflicts on Circle.java"  
[main 4f6664b] Resolved conflicts on Circle.java
```

Mostra l'historial de commits de manera gràfica.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACION_M03_M05/ENTORNS DE DES  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git log --oneline  
4f6664b (HEAD -> main) Resolved conflicts on Circle.java  
55be051 Method diameter  
f02c386 Method perimeter  
d5735ef File README.md  
65bb47c Header Circle.java 2  
22508e7 Revert "Revert last commit"  
9bff90c Header Circle.java  
a987ac7 First commit, area circle method created  
cb7c8ca (origin/main) Creating project compatibility with Eclipse IDE  
b5656ef First commit
```

12. BRANCA circle-main

Situat a la branca "master" i crea una branca "circle-main".
Situat en aquesta nova branca.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS [main]
$ git checkout -b circle-main
Switched to a new branch 'circle-main'

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS [circle-main]
$
```

Modifica la classe **CircleMain.java** perquè mostri els dos mètodes nous, el perímetre i el diàmetre. El resultat ha de ser el següent:

```
Enter the radius in meters: 10
The area is: 314.1592653589793
The perimeter is: 62.83185307179586
The diameter is: 20.0
```

Fes un stage i commit i mostra l'historial de manera gràfica.
Missatge del commit: "**File CircleMain.java**"

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS [circle-main]
$ git commit -m "File CircleMain.java"
[circle-main ae35d8b] File CircleMain.java
2 files changed, 12 insertions(+), 1 deletion(-)
```

13. MERGE circle-main

Situat a master i realitza un merge de la branca "circle-main".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 8 commits.
(use "git push" to publish your local commits)

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git merge circle-main
Updating 4f6664b..ae35d8b
Fast-forward
 src/circle/Circle.java      | 2 +-
 src/circle/CircleMain.java | 11 ++++++++
 2 files changed, 12 insertions(+), 1 deletion(-)
```

Mostra l'història de commits de manera gràfica.

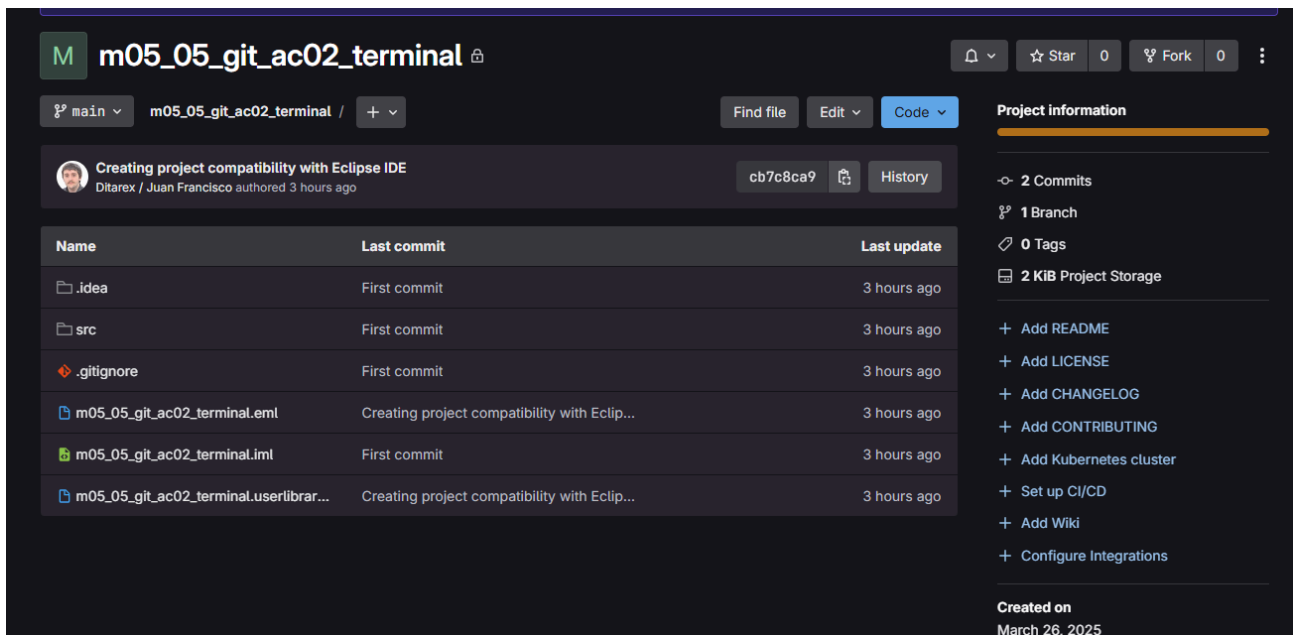
```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git log --oneline
ae35d8b (HEAD -> main) File CircleMain.java
4f6664b Resolved conflicts on Circle.java
55be051 Method diameter
f02c386 Method perimeter
d5735ef File README.md
65bb47c Header Circle.java 2
22508e7 Revert "Revert last commit"
9bfff90c Header Circle.java
a987ac7 First commit, area circle method created
cb7c8ca (origin/main) Creating project compatibility with Eclipse IDE
b5656ef First commit
```

14. PUSH

A GitLab crear un projecte nou (repositori remot)

Project name: **m05_05_git_ac02_terminal**

No afegeixis el fitxer **README**.



Des de terminal defineix el repository remot.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git remote add origin https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.git
```

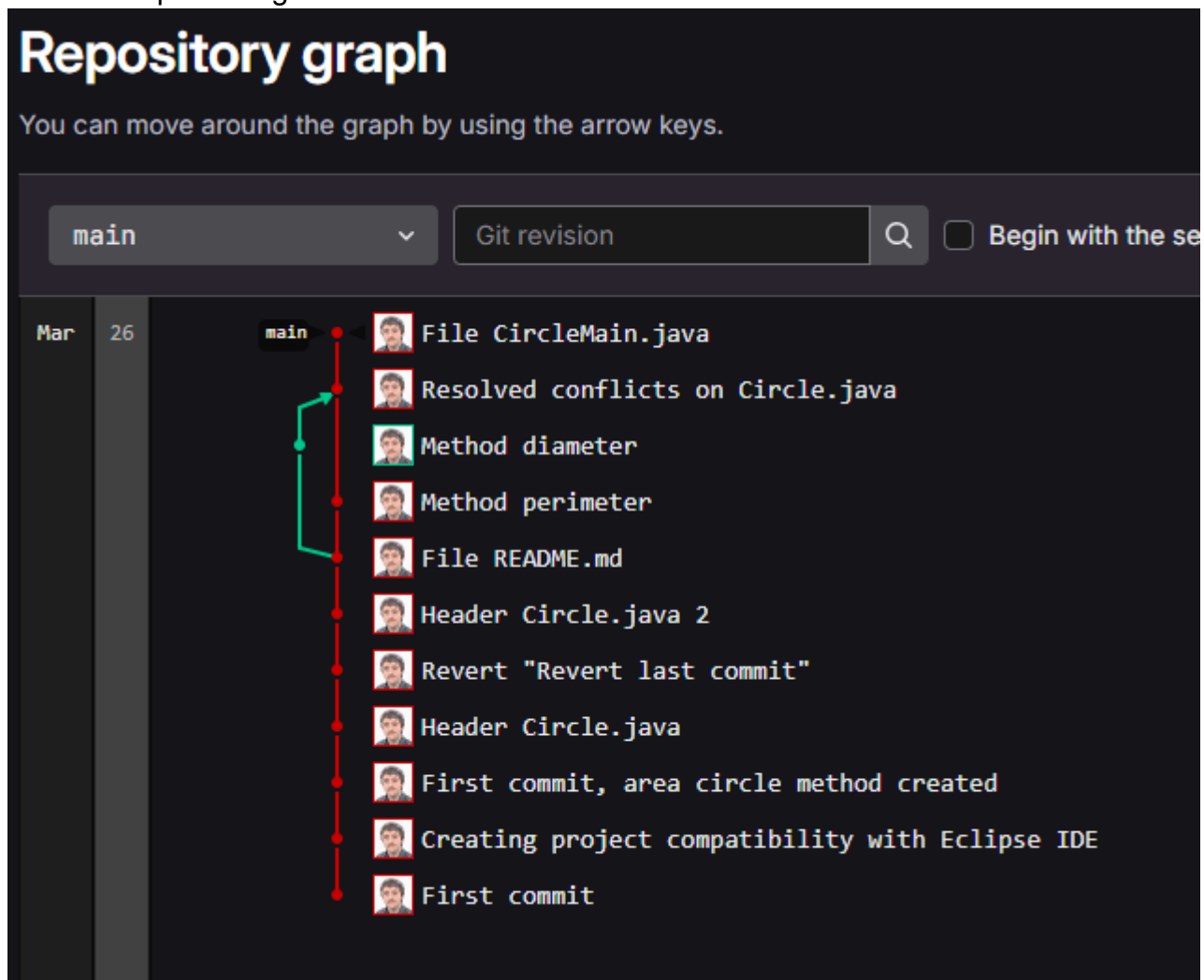
Mostra la llista de remots.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS D
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)
$ git remote -v
origin https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.git (fetch)
origin https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.git (push)
```

Fes un PUSH de la branca "master".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORN  
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git push --set-upstream origin main  
Enumerating objects: 11, done.  
Counting objects: 100% (11/11), done.  
Delta compression using up to 12 threads  
Compressing objects: 100% (9/9), done.  
Writing objects: 100% (11/11), 1.65 KiB | 1.65 MiB/s, done.  
Total 11 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)  
To https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.git  
* [new branch]      main -> main  
branch 'main' set up to track 'origin/main'.
```

Comprova el gràfic al Gitlab.com.



Com pots veure només s'ha pujat una branca, la "**master**", per pujar totes les branques, fes un altre PUSH indicant ara totes les branches.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTOR  
NVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal (main)  
$ git push --all origin  
Enumerating objects: 20, done.  
Counting objects: 100% (20/20), done.  
Delta compression using up to 12 threads  
Compressing objects: 100% (12/12), done.  
Writing objects: 100% (15/15), 1.05 KiB | 1.05 MiB/s, done.  
Total 15 (delta 8), reused 0 (delta 0), pack-reused 0 (from 0)  
remote:  
remote: To create a merge request for circle-diameter, visit:  
remote:   https://gitlab.com/ditarex95/m05_05_git_ac02_terminal/-/merge  
new?merge_request%5Bsource_branch%5D=circle-diameter  
remote:  
remote:  
remote: To create a merge request for circle-main, visit:  
Merge branch 'circle-perimeter'
```

Comprova en el remot que s'han pujat totes les branques.

Repository graph

You can move around the graph by using the arrow keys.

main

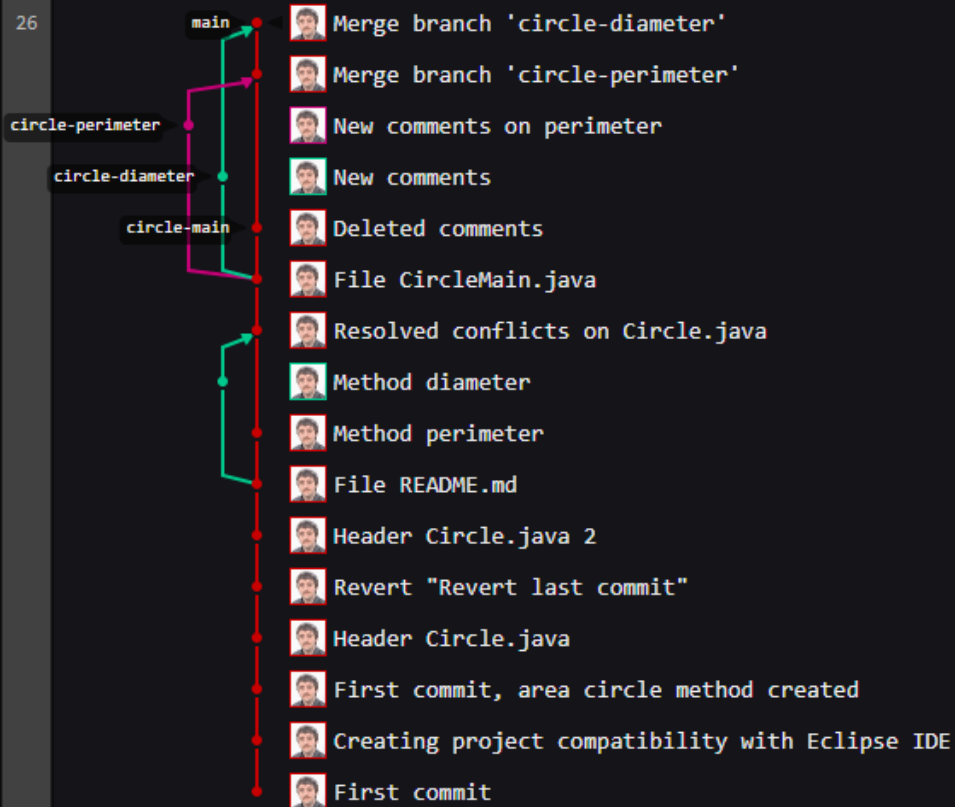
Git revision



☐ Begin with the selected commit

Mar

26



15. CLONE

En un altre directori del teu ordinador realitza un clone de "**master**".

Crea un nou directori en el teu ordinador de nom "**gitclone**" que estigui buit.

Realitza un "git clone" (afegeix el punt al final perquè afegeixi els fitxers en aquest directori sense crear un altre directori). No cal fer "git init" quan fem "git clone".

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal_cloned (main)
$ git clone https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.git
Cloning into 'm05_05_git_ac02_terminal'...
remote: Enumerating objects: 78, done.
remote: Counting objects: 100% (78/78), done.
remote: Compressing objects: 100% (65/65), done.
remote: Total 78 (delta 29), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (78/78), 8.09 KiB | 1.35 MiB/s, done.
Resolving deltas: 100% (29/29), done.
```

Mostrar l'historial de commits de manera gràfica.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal_cloned (main)
$ git log --oneline
86fba02 (HEAD -> main, origin/main, origin/HEAD) Merge branch 'circle-diameter'
227e52a Merge branch 'circle-perimeter'
003e317 (origin/circle-perimeter) New comments on perimeter
5147570 (origin/circle-diameter) New comments
13829a9 (origin/circle-main) Deleted comments
ae35d8b File CircleMain.java
4f6664b Resolved conflicts on Circle.java
55be051 Method diameter
f02c386 Method perimeter
d5735ef File README.md
65bb47c Header Circle.java 2
22508e7 Revert "Revert last commit"
9bffa90c Header Circle.java
a987ac7 First commit, area circle method created
cb7c8ca Creating project compatibility with Eclipse IDE
b5656ef First commit
```

Mostrar totes branques actives i no actives.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE
ENVOLUPAMENT/Actividad Git Entornos/m05_05_git_ac02_terminal_cloned (main)
$ git branch -a
* main
  remotes/origin/HEAD -> origin/main
  remotes/origin/circle-diameter
  remotes/origin/circle-main
  remotes/origin/circle-perimeter
  remotes/origin/main
```


Mostra totes les branques remotes

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Des  
ENVOLUPAMENT/Actividad Git Entorno  
$ git branch -r  
origin/HEAD -> origin/main  
origin/circle-diameter  
origin/circle-main  
origin/circle-perimeter  
origin/main
```

Com pots veure només està activa la branca "**master**", activa totes les branques

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Des  
ENVOLUPAMENT/Actividad Git Entorno  
$ git branch  
circle-diameter  
* circle-main  
circle-perimeter  
main
```

Mostra ara totes les branques.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1  
ENVOLUPAMENT/Actividad Git Entornos/m05_05_g  
$ git branch -a  
circle-diameter  
* circle-main  
circle-perimeter  
main  
remotes/origin/HEAD -> origin/main  
remotes/origin/circle-diameter  
remotes/origin/circle-main  
remotes/origin/circle-perimeter  
remotes/origin/main
```

16. PULL

En un altre directori realitza un pull de "**master**".

Crea un nou directori de nom "**gitpull**" i inicia el git.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DES  
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)  
$ git init  
Initialized empty Git repository in C:/Users/Fran/Desktop/DAM 1/PROGRAMACIÓN_M03  
_M05/ENTORNS DE DESENVOLUPAMENT/Actividad Git Entornos/gitpull/.git/
```

Definir el repositori remot i realitza un pull.

```
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DES  
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)  
$ git remote add origin https://gitlab.com/ditarex95/m05_05_git_ac02_terminal.gi  
t  
  
Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACIÓN_M03_M05/ENTORNS DE DES  
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)  
$ git pull origin main  
remote: Enumerating objects: 78, done.  
remote: Counting objects: 100% (78/78), done.  
remote: Compressing objects: 100% (65/65), done.  
remote: Total 78 (delta 29), reused 0 (delta 0), pack-reused 0 (from 0)  
Unpacking objects: 100% (78/78), 8.07 KiB | 39.00 KiB/s, done.  
From https://gitlab.com/ditarex95/m05_05_git_ac02_terminal  
* branch          main          -> FETCH_HEAD  
* [new branch]    main          -> origin/main
```

Mostrar l'història de commits de manera gràfica.

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)
$ git log --oneline --graph --all
* 86fba02 (HEAD -> main, origin/main) Merge branch 'circle-diameter'
|
| * 5147570 New comments
| * 227e52a Merge branch 'circle-perimeter'
|
| * 003e317 New comments on perimeter
|
| * 13829a9 Deleted comments
|
| * ae35d8b File CircleMain.java
| * 4f6664b Resolved conflicts on Circle.java
|
| * 55be051 Method diameter
| * f02c386 Method perimeter
|
| * d5735ef File README.md
| * 65bb47c Header Circle.java 2
| * 22508e7 Revert "Revert last commit"
| * 9bff90c Header Circle.java

```

Mostrar totes branques actives i no actives.

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)
$ git branch -a
* main
remotes/origin/main

```

Com pots veure només està activa la branca "**master**", activa totes les branques

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)
$ git fetch --all
From https://gitlab.com/ditarex95/m05_05_git_ac02_terminal
* [new branch]      circle-diameter -> origin/circle-diameter
* [new branch]      circle-main     -> origin/circle-main
* [new branch]      circle-perimeter -> origin/circle-perimeter

```

Mostra ara totes les branques.

```

Fran@DESKTOP-UPQF85T MINGW64 ~/Desktop/DAM 1/PROGRAMACI3N_M03_M05/ENTORNS DE DES
ENVOLUPAMENT/Actividad Git Entornos/gitpull (main)
$ git branch -a
* main
remotes/origin/circle-diameter
remotes/origin/circle-main
remotes/origin/circle-perimeter
remotes/origin/main

```

Llicència

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